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MENES AND CHEOPS.

MENES AND CHEOPS.

Dr ABBOTTS SEAL

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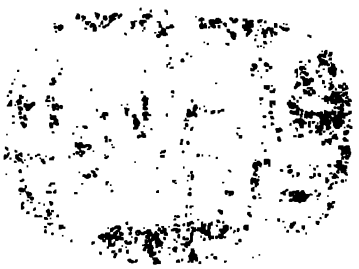
UNDER

WITH

BY CARL

LONDON:
LONGMANS, GREEN, AND CO.
1869.



MENES AND CHEOPS

IDENTIFIED IN HISTORY

UNDER DIFFERENT NAMES:

WITH OTHER COSAS.

BY CARL VON RIKART.

'He that believeth shall not make haste.'—ISAIAH xxviii. 16.

LONDON:
LONGMANS, GREEN, AND CO.
1869.

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PREFACE.

To THE READER:

Dr. Spurzheim sent one of his works to an intimate friend who did not notice it.

After some time, Dr. Spurzheim met his friend and extracted from him the following opinion: 'In your work, Dr. Spurzheim, there are new things and true things, but unfortunately *all* the new things are *not* true things, neither are all the *true* things *new* things.'

I hope in my 'Cosas' it may not be said there are neither true things nor new things to be found.

LONDON: *November* 1869.

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MENES AND CHEOPS IDENTIFIED.

CHAPTER I.

COSAS ON EGYPTIAN CHRONOLOGY.

It has been well said, 'Precision in accounts is the first step to effective control in business operations and economical management.' May we not say, 'Precision in chronology is the first step towards correctness in history?' If so, what are we to say of Egyptian chronology, in which at present there is no accord? Is it entirely hopeless to explain it? must it be given up in despair? I think not; but I believe we must trust to the Bible for a key; any one believing the Bible to be, as I do, a revelation from the Almighty, will believe it true; *if* the question of chronology is of *any* importance for man to know correctly, we may be certain it is truly related in the Bible. When I consider how scientific men write, discuss, dispute, and differ about the age of the world, and how long man has been in existence; from whence arises an inclination to first doubt and then disbelieve the statements in Scripture (and the moment this thin end of the wedge is inserted, all trust in revelation is entirely overthrown), I say, therefore, chronology *is* very important.

I am afraid we must thank Archbishop Usher for the present state of the case; his unadvised (to my mind) insertion of marginal dates in the authorised version of the English Bible, about 160 years ago, has been a very great detriment to true science and religion. Where or how he got his dates I cannot imagine. To show their absurdity I will refer to a few. There may be also printer's errors—which should not be.

In Gen. iv. 17, the birth of Cain's son is recorded, which Usher (see margin) puts in B.C. 3875; in the same chapter, v. 24, under date (by Usher) of the next year (3874), Lamech, fifth in descent from Cain, declares he will be 'avenged seventy and seven fold' more than his ancestor.* How could a primate of all England make such a mistake? In the next verse (25), we have the birth of Enos, the son of Seth, placed against the date of his father's birth: it should be v. 26. In chap. x. 8, we have Nimrod, the grandson of Ham, born in 2218, one year before Peleg, fourth from Shem (Gen. x. 25); how can this be explained, and why insert the date of Nimrod? is it to fix the time of the building of Babel, and the supposed date or time of dispersion? Let us go to Jacob (Gen. xxv. 22); the Archbishop makes Jacob born B.C. 1837, and married to Leah 1753 (Gen. xxix. 20), Reuben born in 1752, and Dinah, her seventh child, in 1745 or eight years after the marriage, although in the last verse of this chapter (xxix.) we are told Leah for a time 'left bearing.' Usher thus allows no space for a prolonged time between the birth of the fourth and fifth sons, in direct

* Two Bibles, one of Oxford, one of Cambridge, agree in these dates.

opposition to the text. Usher, by making Jacob born B.C. 1837, and married in 1753, makes him 84 when he married.

I am well aware the Church of England is in no way pledged to any errors of Archbishop Usher; but is this fact generally known, is it generally believed? If not, these gross errors do great harm.

Cannot one primate correct the errors of his predecessor, or are they like Popes, and refuse to acknowlege a mistake? Better far would it be to have *no dates*, and oblige each one for himself to *read*, 'mark, learn, and inwardly digest.' Study of the Scriptures leads to good, no matter what the objects.

Is it hopeless to point out a better system of chronology? I think not, and hope I may be enabled to succeed.

It is but natural I should begin with the chronology of Egypt: it is a nation more mixed with the Hebrews than any other; of its chronology, thus far, there has been no satisfactory or systematic explanation; but every new writer appears to carry the date of Menes into a more remote period.

My attention was drawn to this when reading Professor Smyth's book on 'Life and Work at the Great Pyramid,' in which (vol. iii. 322–3) 'he remarks upon Manetho's dynasties. Early Egyptian monarchs, as every one knows, are always arranged in dynasties; what are these dynasties?

'They first appear in the work of Manetho, in the age of Ptolemy Philadelphus, 280 B.C., or nearly 100 years after the last reputed dynasty had expired, and 4,000 after the first is *reported* to have begun with

Menes. The dynasties *may* have formed a mode of arranging or talking about their past kings, always in vogue among the Egyptian priests; or they *may* have been so arranged by Manetho himself . . . Certain it is that subsequent critics have been much puzzled to define a dynasty in Egyptian history; so little is there often to distinguish between the last king of a former, and the first king of a following dynasty, or to show why a dynastic separation should have been made between them.

'Certain it is also, that dynasties are never alluded to in hieroghyphics of regal names . . . There is nothing on the monuments about the dynasty, either in name or number.' The Professor, I think, should have said, not only that these 'dynasties first appear in the work of Manetho,' but also, that Manetho was the first person who wrote an Egyptian history, as far as we know. I will conclude my present extract from the Professor's work (which I might very easily extend), by his final sentence on p. 326, an extract from Sir G. C. Lewis. 'Egyptology has an historical method of its own. It recognises none of the ordinary rules of evidence; the extent of its demands on our credulity is almost unbounded. Even the writers on Italian ethnology are moderate and tame in their hypotheses, compared with the Egyptologists. Under their potent logic, all identity disappears; everything is subject to become anything but itself. Successive dynasties become contemporary dynasties; one king becomes another king, or several other kings, or a fraction of another king; one name becomes another name; one

number becomes another number; one place becomes another place.'

Hard and severe criticisim. I hope I may be able to avoid a like castigation.*

The learned Professor (and here let me pay a slight tribute of honour and respect to the labours which he and Mrs. Smyth underwent in their work at the Great Pyramid), at vol. iii. p. 328 goes on to say, 'But though there be some points extremely unsettled even still among Egyptologists, that must not blind us to the very great number of points on which they are either perfectly or almost agreed, and do produce nearly identical, and those sensible phrases, out of the same hieroglyphic inscription.' 'Similarly, too, in the vexed subject of the dynasties, they form at least a something tangible on the surface of the dark water of old historic literature.'

At p. 321, vol. iii., he gives six columns of the dates of various authors for the first twenty dynasties; omitting the two first, we have in the third Lepsius, in the fourth Bunsen, in the fifth Lane, Wilkinson and Poole, and in the sixth W. Osburn: certainly all men of mark. Their conclusions are as follows:—

Dynasty.	Lepsius.	Bunsen.	Lane, &c.	Osburn.
	B.C.	B.C.	B.C.	B.C.
1	3892	3623	2700	2429
	3639	3434	2480	2329
2	3639	3433	2480	2329
	3338	3210	2080	2329
3	3338	3433	2670	2329
	3124	3210	2440	2229

* Sir C. Lewis does not appear to have known that; Apollodorus says, *δυναστεία* did not mean a family.

the fourth of 322 years. After this I do not think anyone can say the right hon. baronet was too severe. In the same way, if anyone will take the trouble to work out the ideas of each separate writer, as to his own opinion which dynasties are contemporaneous, he will find not the least accord.

I am not aware that Manetho ever made any allusion to his dynasties being contemporaneous; on the contrary, he gives five—thirteen to seventeen inclusive—to the Hyksôs. Why, then, do modern writers, in order to escape from a difficulty, make dynasties contemporary? Even in doing this they can come to no accord. I beg humbly to submit this is no way to write History. If a point cannot be cleared up, better say so at once. No doubt Romulus and Remus (if they ever existed) were joint or contemporary rulers of the first Romans, but their dynasty was the same, and they were followed by single kings. What was the exact number of years which Manetho gave to his list of kings, from Menes to the last, may be doubtful; it is said to be 3,555 years. I think the three fives look very like an error in a copyist. But I am willing to assume somewhere about 3,500, and in these are included the Hyksôs 500, thus leaving about 3,000 under native rule. I suppose the dynasties expired when Egypt was conquered in the time of Ochis, B.C. 350 (Lemprière), so that Menes would appear to date from B.C. 3,350. When I come to my chapter on the dynasties, I hope to be able to explain this date in a clear and satisfactory manner. I hope also to explain the mysterious Hyksôs.

Now if we go back to the time of Manetho, we find the LXX must have been engaged in their translation of the Hebrew Scriptures at the time when he was at

work on his History; his History was completed apparently first, and the king, subsequently receiving the work of the LXX, naturally was surprised at the difference in the chronology; perhaps he had read Herodotus, and remembered the traveller said, 'Those who are *disposed* to believe the fables of the Egyptian priests, may do so.'

This being the state of things, Ptolemy Energetes placed the matter for examination in the hands of Eratosthenes, a man who no doubt was *very* eminent as a scholar amongst the eminent men of the time. This happened circa B.C. 240; Manetho having written circa B.C. 280, and the LXX finished their translation circa B.C. 275, or about the time Eratosthenes was born at Cyrene.

The chronology of the LXX, in Gen. xi., it is well known differs from the Hebrew, according to the various versions, 880 to 650 years, whether the so-called 'second Canaan' be included, and if the generation of Nabor be 100 years more or less. With great respect for Professor Smyth, I do not think in his remarks, (vol. iii. p. 349) he allows sufficient authority to Eratosthenes. No doubt, being a Greek, he was obliged, like all other Egyptologists except Manetho and Africanus, to pick up his information at 'second-hand,' or through translators; but I am very much disposed to question whether a man like Eratosthenes confined his enquiries 'among Greeks only.' I am more of opinion he acted as the learned Professor did, and sought knowledge everywhere, in whatever place he could find it. Certainly his sources must have been almost entirely confined to the Egyptian priests and their records, with a few Greek scholars.

Eratosthenes in his enquiries found the LXX translation of the Bible. This he very naturally received with its chronology as a true and correct version of the original, as Professor Smyth, Dr. Lepsius, or Baron Bunsen would in our time receive a similar work made under like circumstances; and we shall find, was no doubt influenced by it in his review of Manetho. I do not mean to insinuate he was a believer in the Bible: he probably thought it better authority, and a more consistent story, as far as he could form an opinion, than Manetho, and there were not more than fifty years between him and Manetho. No one would have thought of testing it by the original Hebrew. Canon Trevor of York, in England, in his 'Ancient Egypt,' says (p. 101) that Eratosthenes places Menes B.C. 2600, also that Josephus adopts the chronology of the LXX. But is it to be said Josephus adopts the chronology of the LXX, if he quotes a text from the Old Testament in that version?

The LXX doubtless give the *spirit* or meaning of the original Hebrew; but a question of chronology, as in Gen. xi., would not arise unless a critic was examining that particular point.

Some assert the LXX must be correct in the chronology, because this version is quoted in the New Testament, thus inferring that our Saviour approved it; but our Saviour did not speak *Greek*, but the colloquial of the time, Syriac or whatever it was.

The same applies to the Evangelists; some if *not all* of the four Gospels were at first written in the colloquial, and after translated into Greek. In doing this the translators naturally turned to the Greek trans-

lation. Was the Epistle to the Hebrews written in Greek?

I believe Eratosthenes adopted the chronology of the LXX, and Josephus *did not.*

Trevor says, Eratosthenes places Menes in B.C 2600.

Wilkinson says, Josephus puts him *about* 1,300 years before Solomon. What do '*about* 1,300 *years*' imply, but *from* 1350 *to* 1250? Let us examine it in this light.

By Usher, Solomon came to the throne (after David's death) in B.C. 1015.

Now 1,015+1,350=2,365 and 1,015+1,250 are 2,265. Therefore, between these two dates Josephus places Menes; they do not agree with the LXX.

Between the middle of Peleg's life and the date of Abraham's birth, the difference existing between the Hebrew and LXX text is 350 to 250, according to various readings.

We find the same in this *about* of Josephus, compared with Eratosthenes.

Solomon, 1,015 + 1,350 + 250 = 2,615.

Solomon, 1,015 + 1,250 + 250 = 2,515.

How, then, can Canon Trevor *prove* Josephus adopts the chronology of the LXX? does he ever say so, and where?

Eratosthenes and Josephus may be said to agree; why, because the first wrote over 300 years before the last, and trusted to a perverted translation of the original. But it is conclusive; both refer to the same person, and one who is recorded in Scripture.

How this perversion took place, and *why*, I hope hereafter to show.

We well know all Hebrews were most jealous to maintain the purity and correctness of the original text; how then can we imagine Josephus yielded it on such a point? That is, if chronology is essential!

There being no common era in general chronology from which to proceed downwards, we are forced to take a well authenticated date, and proceed backwards. It might be supposed such a date would be supplied in the founding of Solomon's Temple, but there is a great dispute to what date the 480 years of 1 Kings vi. refers; in his 'Ancient Egypt' (fo. 211) Canon Trevor gives five authorities, who differ between 579 to 638 years in the time; we had therefore better try another date, which I find in the ending of the 70 years' captivity, when Cyrus took Babylon in B.C. 536 or 538. Our first step back is to the destruction of the Temple, at which time the captivity began; it is perfectly evident from the duration of the captivity, its termination, and the destruction of the Temple (all being in the same paragraph in 2 Chron. xxxvi. 17 to 21), these three events are meant to be taken together. We here obtain seventy years for our first step, and as the Temple existed four hundred and twenty-four years, it must have been founded in B.C. 1030 not 1012. It appears to me the solution of the difficulty as regards the 480 years of 1 Kings vi. is to be found in Josh. xiv. when the land was divided, and the prophecy of Gen. xv. respecting the 400 years or upwards, but not 500, and the return and possession was completed. Caleb said, verses 7 to 10, 45 years had elapsed since Moses sent him out as a spy; these 45 years added to 480, making 525, give the date of the Exodus in B.C. 1555.

I am the more confirmed in this opinion, as it agrees with St. Paul, who, Acts xiii. 20, speaking of the conquest of Canaan, and the *division* of the land by lot, says, 'He gave unto them judges, about the space of 450 years, to Samuel;' add to these 450 years, the 40 years of David's reign, and we have 'about' 490 against a positive 480. The words in the English Bible, of 1 Kings vi. are 'four hundred and eighty years after the children of Israel came out of Egypt.' I beg to say, that when the Book of Kings was written * Egypt did not go by its present name. The LXX have 'after the Exodus of the children of Israel,' showing how it was understood by them. It appears to me St. Paul's words are a direct commentary on this; it was not for him to point out to his converts these trifling chronological errors, but he has done it, so that *we* can see it; but the early converts to Christianity could not have borne it: the food would have been too strong for them. Saul was rejected or deposed by 'the Lord,' and therefore his reign will not count.

In 1 Sam. xv. 28 we have, 'and Samuel said unto him (Saul), The Lord hath rent the kingdom of Israel from thee this day, and hath given it to a neighbour of thine better than thou.' Also in 1 Sam. xvi. 1 we have, 'And the Lord said unto Samuel, How long wilt thou mourn for Saul, seeing I have rejected him from reigning over Israel?' † All the land west of the Euphrates was known in those times, and is described in Scripture as the 'land of Cush,' or 'Ethiopia,' not as Egypt. We now come to the length of the sojourn of the Hebrews

* See note at end of chapter.

† Again, Saul was contemporary with both Samuel and David; if, therefore, his reign is to count, theirs must be curtailed.

in Egypt, stated in Exodus xii. 40 and 41 at 430 years. St. Paul, in Gal. iii. 17, says there were 430 years between the 'two covenants.' Now, when does the first covenant date from? It is generally supposed to date from the call, but it was repeated many times, both to Isaac and Jacob, as well as to Abraham; further, it is spoken of in Chron. xvi. and Psalm cv. as a covenant made with Abraham and confirmed with Jacob; therefore we must include the three times it was repeated or confirmed to Jacob, the last being in Gen. xlv., when he was 'en route' to join Joseph.

St. Paul, in Gal. iii. 27, evidently refers to this confirmation when he says, 'And this I say, that the covenant that *was confirmed* before of God in Christ, the law, which was 430 years after, cannot disannul.' Thus, Exodus and St. Paul exactly agree. Again, the prophecy in Gen. xv., like all prophecies, is future, and foretells a residence in *another* land, of 400 years, by the *descendants* of Abraham—as Isaac never did leave Canaan; if the 430 years of Exodus does not complete this prophecy, it is not yet completed. Thus, all five texts agree, and we have Jacob's entry into Egypt in 1985 B.C., not 1706, according to Usher, and probably the Hebrews and LXX. That the LXX took this view is evident from the interpolation in Exod. xii. 40, 41. I had assumed a difference of 235 years between Eratosthenes and Josephus, the first having taken the chronology of the LXX; but as I have carried the entry of Jacob into Egypt 279 years further back than Usher, I appear further back than Eratosthenes. Let me see if I can find a date in Eratosthenes to start from. I here annex a list of his kings, as they have

come down to us; his works, it is well known, are almost entirely lost; what we have are merely extracts preserved as quotations by other writers in their treatises.

Kings of Thebes, according to Eratosthenes.

		Years
1.	Menes	reigned 62
2.	Athothis, his son	„ 59
3.	Athothis „	„ 32
4.	Diabries, son of Athothis	„ 19
5.	Pemphos, or Semphos, ditto	„ 18
6.	Tægar	„ 79
7.	Stæchus, his son	„ 6
8.	Gosormies	„ 30
9.	Mares, his son	„ 26
10.	Ansyphis	„ 20
11.	Sirius	„ 18
12.	Chubus	„ 22
13.	Ramosis	„ 13
14.	Bigris	„ 10
15.	Saophis	„ 27
16.	Saophis II.	„ 29
17.	Moscheres—Mycerinus . . .	„ 31
18.	Musthis	„ 33
19.	Tamnes, or Pammes	„ 35
20.	Apappus the Giant, Ἀφώφ, the Pheops of Manetho's Sixth Dynasty . .	„ 100
21.	Asses-chus	„ 1
22.	Nitocris	„ 6
23.	Myrteous	„ 22
24.	Thyosimares, called 'the Sun' . .	„ 12
25.	Thyneithus	„ 8
26.	Semphucrates	„ 18
27.	Chuther Taurus	„ 7
28.	Meures Philoscorus	„ 12
29.	Cho-maephtha	„ 11
30.	Sacunio-sochus	„ 60
31.	Pente-Athyres	„ 16
32.	Stamenemes II.	„ 23
33.	Sistosichernes	„ 55
34.	Mares	„ 43
35.	Siphoas	„ 5
36.	Not given	„ 14
37.	Phuron, or Nilus	„ 5
38.	Amunthanteus	„ 63

I find in Vyse's 'Pyramids of Gigeh' (vol. ii. p. 95) that Moscheres, the seventeenth king on this list, is stated by Eratosthenes to have lived 373 years after the formation of the world. Without any pretence to say what that refers to, I beg to point out, that as the kings who precede him add up to 470 years, some of them must have been considered, even by Eratosthenes, to have been contemporaries.

Have we any data which Eratosthenes did not possess, by which we can examine and correct this list?

I think we have, in the hieroglyphics in the Wady Maghara. It is not probable these records were known to him, perhaps not even to Manetho. We there find royal names which I believe modern Egyptologists without exception ascribe to Manetho's fourth dynasty; but there is Athothis, or Thoth, of the *first*, Sephuris of the *third*, the Ansyphis of Eratosthenes, Saophis and Mencheres of the *fourth*, and Tancheres or Tatcheres of the *fifth*, the Tamnes of Eratosthenes. Whilst Egyptologists put these all down to the *fourth* dynasty, it is clear these engravings or sculptures bear evident marks of having been all made at the same time.

Now, between the *deaths* of Athothis and Tamnes there are 448 years. I propose, therefore, to strike out of Eratosthenes all those names not found in Wady Maghara; the hieroglyphics there are no doubt the oldest known, and records of the children of Ham on their journey to Egypt. The names which appear to me to correspond are Athothis and Toth, Ansyphis and Sephuris, whose reign is said to be 20 years, Saophis and Suphis 27 years, Moscheres and Mencheres 31 years, Tamnes and Tatcheres 35 years. The

reigns of these four amount to 113 years, and assuming they did reign, we will leave their names in the list, thus reducing the number of years between Athothis and Pheops, or Ἀφώφ, No. 20 of Eratosthenes, by 335 years, and so bring Menes into apparently 100 years below the date where Josephus appears to place him. I do not say these princes did not *live*; I mean they were not rulers of Egypt, or Pharaohs, they were 'the princes of Pharoah,' mentioned in Scripture at Abraham's visit—the first notice of any kind that we have of Egypt.

NOTE TO CHRONOLOGY.

I find, in Bunsen's fifth, or posthumous volume, many remarks which lead me to suppose he was not satisfied with what he had previously published on this head.

Page 5, of the 'Introductory Remarks,' we have, 'The chronological series established on Egyptian monuments or records may be obviously confirmed by Biblical synchronisms, *or* by an Assyrian, Babylonian, or Greek event connected with the Egyptian.' The italic is mine. But if his alterations in profane history are equal to those he makes in Biblical, viz., making the Hebrew sojourn in Egypt over 1,400 years, how can we put any trust in his deductions? 'But the time has now come for speaking out, once for all.' And next page, 'None of the Manethonian numbers are either imaginary, mythical or cyclical;' and, 'But some of them are repetitions, some are collateral dates, *the key to which is wanting.*' Again italics are mine. And on same page (6) he comes to the conclusion that Eratosthenes had seen good ground to reduce the lists of Manetho no less than 424 years, and Apollodorus a further sum of 350 years in the Middle Empire, which was either 922 or 771 years, he cannot decide which. $424+350=774$ years.

This difference of 774 years makes Manetho's list either 3,555 or 2,781 years.

The deductions made by Eratosthenes and Apollodorus, acknowledged by Bunsen, of 424 and 350, added to the 250 of the LXX elongation after the middle of Peleg's life, reduce the list of Manetho 1,024 years, and thus makes it only 2,531.

But there are two readings in the LXX, and a difference of 100 years between them in the chronology after Peleg; we here, then, have other figures, viz., 2,431.

Further, some writers say the dispersion took place when Peleg was only ten years old; this will make again an alteration of *over* 100 years, and we have a third set, viz., 2,331.

Add to these figures 350 years for the probable time—Manetho meant for the expiry before our era—and we have a date somewhere near to B.C. 2681 for Menes.

In Bunsen, vol. v. p. 7, we have, 'That the Manethonian system can only be restored on the basis of the method pursued by us; that it has been restored successively in the course of our inquiry; but that it proves unsatisfactory from our inability to apply to it any strict check, and that it is chronologically as unreal in the Middle, as in the Old Empire; that Alexandrian ingenuity and research have discovered, both for the Middle and Old Empires, the true chronological measurement.

'The proposed change in our dates, connected with the adoption of this research and measurement, directly affects only the Hyksôs period.' How can he say this? Eratosthenes' 424 years apply only to the Old Empire.

And page 32, we have, 'We may say, therefore, that the key to Manetho's arrangement of dynasties and regnal years is lost; that we can restore the 3,555 years according to his numbers; but that these are not to be relied on, on the contrary, that they are inaccurate.'

It is perfectly evident to me that both Eratosthenes and Apollodorus put more trust in what Bunsen is pleased to call Hebrew tradition, perverted as it was by the LXX (which text, no doubt, they only knew), than they did in those

mythical tales which Bunsen prefers to rest upon and thus correct the Bible.

I may seem very harsh, but it appears to me that Baron Bunsen, who, I believe, was a very amiable, loveable (if such a word is correct) man, had a morbid or physical dislike to the Bible. Is that the consequence of being a Unitarian? which I believe he was. For instance, he says, in his 'Egypt's Place in Universal History,' vol. iii. p. 335, respecting Sesurtasen I. as he calls him, 'But which was the year of the dream? Most probably the year of accession, or the first year of the sole reign of Sesostris I.'

Now surely this is an easy way of putting aside the Biblical relation, which is, the baker and butler were put into prison for an offence against the king, that one was executed, the other restored to *favour*; no account of any other king than the one he had offended; that 'two full years' after the *dreams*, not one dream occurred.

Again we have, 'The whole story shows that the seven years of scarcity all occurred in his reign.' No word of the seven years of plenty which took place previously; if the first, surely the last also. He would imply there was only one king during Joseph's long administration as Viceroy, of eighty years.

Again, vol. iii. p. 339, he says, 'It is very easy for critics to say these dates are mythical, whereas the only thing about the matter which looks mythical is our ignorance of those times.'

And to show his trust in the only history of those times we have, he says, 'But how old was Jacob when he was sent into Mesopotamia? He was evidently a grown-up man of about twenty years, not much more or less.' Anyone who will turn to the Bible must come to the conclusion, he went to Mesopotamia after the marriage of Esau, who is stated to have married when forty years old.

Again he says, 'Jacob must have been born when his father was about six-and-thirty.'

The Bible says, *sixty*; and though I believe this implies *above*, over, or beyond sixty, and that he was really seventy-

four, I give my reasons, as will be seen in my third chapter: they may be good or they may be bad. I believe it is the only case in which I differ with the words of the Bible, but the learned Baron gives no reason for his differences with Holy Scripture.

NOTE ON NAME OF EGYPT.

Does the name of Egypt come from 'Aia,' Koptos, *land of the Copts*? Koptos easily becomes Goptos or Guptus. Again, are not Egypt and Ethiopia one country, or is Egypt a part of the kingdom of Arabia and Egypt? We are told Moses married an Arabian, and Miriam and Aaron disliked his Ethiopian wife; as we are not told Moses had *two* wives, must not this apply to Jethro's daughter?

Xerxes, we know, conquered Egypt; we find Herodotus speaks of an Ethiopian contingent in his army, armed with arrows whose points were stones, with which they cut seals.

Does Ethiopia come from *Aia*? Phiop (Phiops). Was Phiop one of the leaders of the first settlers? As my readers proceed, they will find I assert he was, and give my reasons.

Diodorus says, Chemmis was the Cheops of Herodotus, whilst Egypt is called on the Hieroglyphics, Kemi (the black land). In vol. ii. p. 9, Bunsen says, 'We know that the *sieve*, in later times pronounced *sh*, had in earlier times the sound of *kh*;' he may be quite right, but as he gives no reason for this dictum, I say may not it have been *at first* '*sh*' and hardened by Greeks into '*kh*,' perhaps by *ourselves*?

May not the land have been called at first Shem-i, and by later generations made into Khemi? I think it is an open question.

The Hebrews called the country Msr (Masr or Misr), the Assyrians, Musr.

CHAPTER II.

COSAS ON EGYPTIAN HISTORY.

'A LEGENDARY period is so universal an element in all histories which have not passed through the ordeal of strict criticism, that its formation may be pronounced to be a natural process of the human intellect under certain conditions of civilisation and knowledge. Like all false science, it is the fruit of indolent movements of the intellect. . . . To strip these cherished fictions from the annals of nations is not a popular work. There is always a latent pressure against those who take it up; but it must have its way in the end, like all which tend to establish truth. Historic fables, when picturesque and have some fire of patriotism in them, die hard; but they must submit to the inevitable fate at last.'—*Edinburgh Review*, January 1869.

Having given my ideas of the chronology of Egypt, I will see if I can make its traditions agree with Biblical history; if I cannot, I am sure the fault is on my side. In his 'Monumental History of Egypt' (vol. i. p. 186), W. Osburn says, and with him I quite agree: 'The laws of God's ordinary dealings with man were not departed from to teach ancient history and chronology. Where our deductions in either of these

fields of research are true, they will comport exactly with the facts revealed in the Bible.' How different from Bunsen, who (vol. iv. p. 378) says: 'The task which European science has now to perform is to bring that (Biblical) tradition within the pale of history, i.e. to deal with it conscientiously and honestly, and to analyse it for the purpose of discovering what is the truth which is to be gleaned from it. Of course, we must here take our stand on the Egyptian monuments and records, including the language, and cannot make Biblical research the starting-point.' Suppose these monuments relate fables? Let me here remark that, writing for the English public in my remarks on the Scriptures, I always refer to the authorised version, printed in England under the sanction of the Crown.

The fact is, there is *no* agreement among all the army of Egyptologists for an Egyptian starting-point. How can we find a starting-point when all the monuments are undated? It is a curious fact to mention, and one which may seem doubtful; but in the Rolls Office in London there is a large mass of documents bearing no date A.D. at all; many of them have only the month, some have only the month and regnal year of a king, some neither one nor the other; the same may be said of papal bulls. My authority is a gentleman engaged in deciphering these rolls. We can judge from this what an amount of labour the arranging of these documents in a chronological order must involve, and how uncertain the results must not unfrequently be, seeing most of them have to be translated from a foreign language. Applying this to the matter in hand, we have to translate dateless records of Egypt from hieroglyphic

writing at least 2,000 years older than the Coptic language, by means of which they are now read.

Spelman and Marsham are of opinion that the Christian era had hardly been introduced into England in the time of Charlemagne (see Preface to 'Charter Rolls' by T. D. Hardy). William Rufus, Henry I., Stephen, and Henry II. *never* dated letters patent or letters close, nor even charters, unless to religious foundations.

We can, therefore, only find a starting-point in a picture of a well-known historical event in sacred or profane history. Canon Trevor finds it in the capture of Jerusalem in the twenty-second year of Shiskak or Sheshonk; but as there are three Shishaiks in the twenty-second dynasty, it may be doubtful which is the identical king. I prefer the well-known picture of the thirty-seven Jebusites in the tomb of *Phirai*, to be found in Rosellini's and other Egyptologists' works. I feel perfectly convinced that this picture represents the introduction of Jacob and his five sons to Pharaoh, as described in Gen. xlvii. They are described as Jebusites; Osburn says also, as *Euphratensians*. Now, as Jacob came from Padan-Aram, on the Euphrates, he was very likely to be called a Euphratensian, from the land of the Jebusites, or Palestine, being himself a man of no tribe. They are by some read 'captives or tributaries.' In all other pictures tributaries are painted bringing offerings: these have none; also, in all other pictures captives are not only unarmed, but bound: these are not bound, and are armed. The Bible says, Joseph told Pharaoh his family were *shepherds*: the two first in the procession are leading goats or rams—a pretty strong indication of their occupation. The Bible says

THE 37 JEBUSITES

Joseph presented five of his brothers and also his father to Pharaoh. The narrative is as if there were *two* presentations, but being in the same paragraph they are no doubt intended to be taken together; and it is not a very extraordinary instance of pictorial license, if the artist has put the two presentations into one record. Then again, *six* of the males are in a peculiar dress, as if to make the exact number the Bible describes as presented to Pharaoh—Jacob and five of Joseph's brothers. Some say the person to whom they are presented is not the king: that may or may not be. Perhaps the king had not then assumed all the regalia the subsequent kings assumed; perhaps he chose to receive the family of his favourite in an informal manner.* We have also four women in the same peculiar dress, 'the coat of many colours,' to mark the sons' wives. We have children on a donkey in panniers, the same mode of conveying a family as is practised by the Arabs; the 'waggons,' wains, or means of carriage, as mentioned in the Bible as sent for the 'women and little ones;' and finally, the number thirty-seven is in exact correspondence with the number of Leah's male descendants, named in Gen. xlvi., viz. thirty-one, deducting the two dead in Canaan; Jacob and his five other sons making thirty-seven, presented by one Nofre (good) Hotep, or Hosep, i.e. Joseph, in the sixth year of Osirtasen II., as we call him, or Sesurtasen, according to the papyrus in the hand of Joseph.†

* Is not Phirai equivalent to Phi-ra or 'the King?' They are said to be captives to Phirai!!

† I have said Phi-rai may mean 'the King.'—Can it imply Eph-ra-im,

I cannot but feel convinced this is a picture of the introduction described in Gen. xlvii. in the Bible. As respects the king, in answer to those who say the person represented is not the king, I will ask does Queen Victoria put on her crown and robes of state when a private friend of one of her ministers is introduced to her? All Egyptologists whose works I have read, in alluding to this painting, seem to be inclined to consider it a record of Abraham's visit, as they appear to think it too far back for Jacob. The difference of 215 years between the two visits, the time usually allowed, will explain this discrepancy. But Abraham had only *one* female companion. The number thirty-seven does not accord with either the seventy or sixty-six souls who are spoken of as going into Egypt with Jacob. In reply, I beg to say that all commentators who fix the call of Abraham as the commencement of the sojourn, assume that the Hebrew nation were then in their progenitor. Does not St. Paul say Levi paid tithes to Melchizedek? and as Benjamin's *ten* sons are recorded in Gen. xlvi., he being then not more than twenty-five years old, some must have been included who were born in Egypt! Probably the number then living who went into Egypt with their ancestor were thirty-six, and the number which completed the sixty-six or seventy were born in Egypt, possibly before Jacob died. Perhaps the painter made an error between thirty-six and sixty-six, or our translators of hieroglyphics. As regards the time or date, both Wilkinson as well as Osburn make the year

Joseph's second son, recording in his parlour an event of his father's life? Eph or Iph reversed is Phi-ra-im, the Viceroy's or second King's son, or the second son of the Viceroy.

at which I put Jacob's entry into Egypt, viz. B.C. 1985, to fall within the time of the twelfth dynasty, in which this king, Sesurtasen II., no doubt did reign; but confused with the Bible marginal dates, they question whether it does not refer to Abraham. Bunsen allows Jacob came in in the time of the Sesurtasens. Canon Trevor, in his 'Ancient Egypt' (p. 255), alludes to this painting very fully, and, pointing out the coincidences, says: 'These striking coincidences make it extremely probable that the painting actually represents the Israelite immigration. It is true that the "waggons" which Joseph sent for the *little ones* are wanting.' Again (p. 261), he says: 'The monuments represent them (waggons) as drawn both by oxen and horses, and in very general use.' He overlooks the fact that the monuments he referred to are several centuries later. In all probability our Biblical translators translated the word (waggon) from the Greek, who used a mere term of means of conveyance. We find also at Beni Hassan, the tomb of one Ameni—Amene-m-ha—'a captain of infantry, privy councillor, seal-bearer, and governor of the goat district,' with other offices and titles, one of which is 'cousin to the king,' or 'king's acquaintance:' also that during certain 'years of famine' he supplied his own district with food.

We can hardly suppose that so early as the twelfth dynasty, our modern system of calling nobles 'cousin' prevailed. If therefore the hieroglyphics are correctly rendered he must have been a near relative of one of the kings of the twelfth dynasty, who were all Amene-m-has, or, as Manetho writes them, with a Greek termination Amenemes. The record of the years of famine

is very peculiar, and would, I should suppose, convince anyone they must refer to that continued dearth recorded in the Bible, and of which, or a similar famine, records have been found in the Chinese annals, though it may be very difficult to make the chronology agree. The expressions used, too, imply there was a store or reserve to supply the people—a very uncommon thing in the *East.* The records of Semneh show that some great change in the river was being noted by these Amen-m-has; do not these *facts* prove Joseph came into Egypt in this dynasty?

The date I have fixed as 1985 B.C.

The king is Sistochermes, the thirty-third on the list of Eratosthenes, who according to the same authority came to the throne 865 years after Menes. I have already reduced this amount by 338 years, and thus cut it down to 527 years. Adding 6 years for the time Sesurtasen had reigned, we have the year B.C. 2568 as the date when Menes ascended the throne, or appeared in Egypt. Usher makes Jacob enter Egypt 290 years after Abraham was born; his birth, therefore, would be B.C. 2275, or 243 years after the entry of Menes; here for the present I will leave this part of the history, reserving to myself the right to return and farther correct both Usher and Eratosthenes.

But let me now make a comparison between the figures in Bunsen's fourth volume and mine. I find (p. 507) Joseph stated to be Viceroy in B.C. 2756, under the same king as I assume he was appointed by, but 765 years before. He puts the famine, same page, in B.C. 2748—42, and Jacob's entry in 2743, or the year before the famine ended, thus entirely ignoring Joseph's words,

that the famine had yet *five* years to run, whilst we find in his fifth volume, he says Egyptian history can only be elucidated by Hebrew and other synchronisms.

In this volume, the fourth, he makes the Hyksôs invade Egypt in B.C. 2547 and rule there till 1540, whilst the Exodus, being placed in 1320, the 'sojourn' of the Hebrews was 1423 years.

But in the fifth volume we have a very great change. Joseph appears as Viceroy B.C. 2191, that is 196 not 765 years before me, and Jacob comes to him in 2182, or nine years, not thirteen, as before, after his appointment. In like manner we have the Hyksôs entering Egypt in B.C. 1983, or 564 after his former date, and leaving it B.C. 1548 or four years before his previous date.

I cannot see any reason for this, unless, after publishing his fourth volume for the first time, he heard of Eratosthenes and referred to him and Apollodorus. Bunsen places the picture of the thirty-seven Jebusites in the same reign as I do, and agrees with me in giving to the same king the formation of Lake Mœris.

In his fifth volume he reduces the time of the 'sojourn' to 860 years, just double the words in Exodus xii. 40, 41. In this volume he places the conquest of Egypt by the Hyksôs only two years after my date for Jacob's entry and their leaving in B. C. 1548, or seven years after my date for the Exodus, B. C. 1555 (see ante, Chap. I). Again, I see no kind of reason given for these changes except the words of the last sentence on p. 36, and the first of p. 37 of the fifth volume, and these do not explain how the Baron arrived at these figures.

Bunsen must have known that Josephus said the Hebrews and Hyksôs were one. He knew that Manetho

said, 'After they left Egypt they built a city in that country now called Judea, of sufficient size to contain this multitude of men, and named it Jerusalem.' It has been objected to the proposition, that the Hebrews and Hyksôs were the same, that they did not *found* Jerusalem. I think this a quibble only worthy of an Old Bailey advocate. Would anyone say that Paris and London were built by the Romans? Jerusalem, *as* Manetho *knew* it, *was* built by the Hebrews; the old original city had been destroyed and re-built. Again, Bunsen says the first king of the Hyksôs was Salat-is, and Joseph was appointed *Shallit*, or Viceroy, and yet, the Baron sees no connection between the Hyksôs and the Hebrews, even though he makes the occupation of Egypt by the Hyksôs only five years more than the 430 described in Exodus xii. as the time of the sojourn of the Hebrews.

However valuable Bunsen's observations may be, after these facts, can we put any faith in his deductions?

Upon his mere 'ipse dixit,' a book which has been known for centuries, to say the least, which contains an enormous amount of *acknowledged* truth, is to be shelved for his rendering of undated monuments, in the rendering of which he himself has no confidence.

At page 670, vol. iv. he mentions a papyrus written, as he says, in the nineteenth dynasty (during which we shall see the Hebrews left Egypt), giving an account where Amen-m-ha (who, he says, appointed Joseph, but who, I think, was Joseph's *second* king, for all Joseph's kings were Amen-m-has, Sesurtasens) is reported to have said in his parting advice to his son (perhaps referring to Joseph), how he effected great improvements in

agriculture, so that corn and grain were produced in abundance, by the help of the Nile as a fertilising agent, and that there was neither hunger nor thirst in his days. These words seem to me to point to Joseph's administration.

But to go back. We have only thirty-eight of the kings of Eratosthenes handed down to us, and we must, after the next Mares, No. 34, go to the list of Africanus. Eratosthenes' thirty-seventh corresponds with the first king of the twentieth dynasty of Manetho, not only in name but nearly in length of reign (Trevor, fo. 274). The twelfth dynasty appears to have been all Amen-m-has Sesurtasens, and to have changed their names as Parsees do at this time; thus, Amen-m-ha Sesurtasen is followed by Sesurtasen Amen-m-ha, each having some peculiar description attached to his name, which we convert into first, second, and so forth, and sometimes in consequence get into a little confusion. The report that Menes the first king stopped up the Bar-bela-Mar I consider an entire fable; it could only be done by some one who had some years' experience of the inundations of the Nile, and would not, in all probability, strike the first king as a waste of the productive waters, as long as it was open. It is a very common mode in tradition to centre all great works or great deeds in one celebrated hero; we see much placed to Menes he had no right to, and also the wars of Rameses being given to Sesostris, who no doubt was one of Joseph's Pharaohs, one of the Sesurtasens, or Osirtasens. Sesurtasen, the name of Joseph's three Pharaohs, became a great name both among Egyptians and Greeks, from their great wealth, and the great works they executed; and it is

not at all extraordinary for Eastern narrators to settle questions put to them by troublesome enquirers like Herodotus, by giving any name which strikes upon their memory; this is no doubt how the Greeks put down to Sesostris the wars of Rameses, as well as the making of canals which were made by Sesurtasen.

Sesurtasen II. reigned fifty-five years; he was followed by Mares for forty-three, who survived Joseph twenty-two years and died B.C. 1893; then arose the 'king who knew not Joseph,' the Aahmes or Amosis of the eighteenth dynasty, the first king (see Trevor, fo. 273). The intervening five dynasties are the celebrated Hyksôs, which, as I hope to show, never existed, and which opinion I am convinced Africanus held, as he says Aahmes of the eighteenth was the last king of the twelfth dynasty.

The twelfth dynasty will be found at length in Trevor, fo. 246, and I give it here, though a little out of place.

Manetho.			Eratosthenes.			Monuments.
		Yrs.	No.		Yrs.	
1	Amunenemes last of 11 dynasty . . .	16	32	Penty Athiris .	16	Aumen-m-ha (1)
2	Sesenchosis .	46	33	Stamenemes .	23	Sesortasen (1)
3	Amenemes . .	38				Amen-m-ha (2)
4	Sesostris . .	48	34	Sistochermes .	55	Sesortasen (2)
5	Lacharis . .	8				Sesortasen (3)
6	Amares . . .	8	35	Mares . . .	43	Amen-m-ha (3)
7	Amenemes . .	8				
8	Scennophris .	4				Amen-m-ha (4)

Perhaps it may be asked why I put trust in Africanus? Simply for the reason, that, being a learned man and an Egyptian priest, he became a convert to Christianity. As regards his learning, I fancy there will

be no question: his works are almost entirely lost; and though no doubt he made mistakes, he must have been an honest man to have left 'the loaves and fishes' of the Temple, for the lentils of Christianity. I do not suppose the good faith of a Romish cardinal would be doubted, who left his church to become a curate in a manufacturing parish. As an Egyptian priest, he must have been well acquainted with the Temple records, and it is very possible many things which have come down to us as his, have been *corrected*, or rather perverted, by transcribers who thought him wrong. He says he possessed the sacred books of Cheops, which Herodotus refers to. He states (Trevor, fo. 272), that Amos, Amosis, or Aahmes, the first king of Mantheo's eighteenth dynasty, was the last of the twelfth (fo. 271). Trevor says there is only one ancestor between this king and Menes, on the tablet of Karnak, and on the 'tablet of Abydos' he is the immediate successor of 'Amen-m-ha.' These two tablets are older records than Manetho's history, and records that cannot be tampered with, or handed down to us, in the pages of copyists, inclined to rectify original errors.

The following is the list of kings according to Africanus, from Trevor, fo. 273, where he also gives the list of Manetho after Eusebius, the records found on monuments, and Bunsen's corrections. Africanus imagined the Exodus took place under the first king, and he gives, as Trevor copies, no number of years to his reign; Eusebius gives twenty-five, and as records are found of the twenty-second, I assume twenty-five. This was the 'king that knew not Joseph.'

		Years.	
King Mares, of 12th dynasty, died B.C.			1893
Amos, last of 12th, first of 18th dynasty, reigned		25	
Chebros	„	13	
Amenophis	„	24	
Amersis or Amenses	„	22	
Misaphres	„	13	
Misphragmuthosis	„	26	
Nuphara—Thutmosis of Monuments.			
Tuthmosis	„	9	
Amenophis (Memnon)	„	31	
Horus	„	37	
Acherres	„	32	
Rathos	„	6	
Chebres	„	12	
Acherres	„	12	
Asseses	„	5	
Rameses	„	1	
Amenopath	„	19	
Sethos I. surnamed Ægyptus, 1st of 19th dynasty		51	— 338
Leave B.C.			1555

the year of the Exodus; if we add the forty-nine years Sesurtasen II. lived after Jacob's arrival in Egypt, and the forty-three years of the reign of Mares, to the above 338, we have the exact number of the sojourn, according to Exod. xii. 40, 41.

I do not know what may be thought of this, but it seems to me to bear very strong circumstantial evidence of its being true. Can we obtain any other? Although I have adopted the list of Africanus and believe it to be substantially correct, I think he is in error in his first king of the nineteenth dynasty. I believe the fifty-one years of Sethos include five years of Rameses II. On fo. 294 of Canon Trevor, there is a note where he says, 'Some Egyptologists make Sethos to be father of *two* successors, Rameses II. and III., the latter of whom is the great hero; but it

is generally held they are one and the same person. Rosellini, however, insists the statues show a decided difference of feature.' This is without doubt very strong evidence, and the Bible corroborates it; for we must infer, from the report of Moses' proceedings, that the Exodus Pharaoh did not reign a long time, probably not more than five years, the length of reign given to the successor of Sethos by M. Champollion Figeac (see Osburn's 'Ancient Egypt,' fo. 13, where this King Rameses is stated to have commenced his reign in B.C. 1577). There is here a difference between the learned French Egyptologist and myself of about seventeen years. As regards my date of the Exodus, it rests entirely on the interpretation of Biblical text, and the date of Cyrus.

In his fifth volume, p. 735, Bunsen gives an inscription of Rameses II. wherein the Hebrews are mentioned as employed at labour in building. In his fourth volume, p. 523, he says Moses was born in his reign, and the Exodus took place when Moses was forty-seven. I really think when a man contradicts the Bible as he does, it would be better if he did not name it.

I give my authority in all cases, and it will be for my readers to decide if they are not more trustworthy than Baron Bunsen.

It will be asked why I pass over the Hyksôs kings? For the simple reason, there are no records on the monuments of any such rulers ever having been supreme in Egypt. There are names given to them, but there is nothing at all conclusive—all is very doubtful and open to question.

The tablets of Karnak and Abydos, older records,

and records which could not be tampered with, state that the first king of the eighteenth 'dynasty did follow the dynasty of Amen-m-ha Osirtasens.' Then again (fo. 59), Canon Trevor says, 'Rameses (the Great) is depicted (at Abydos) sitting on his throne, and contemplating the shields or hieroglyphic names of his predecessors. These are arranged in two rows of twenty-six each. The stone is unfortunately much mutilated, and has failed to satisfy the hopes entertained at its discovery, of fixing beyond doubt the fifty-two kings who preceded Rameses.'

It appears to me one reason why we cannot trace the names on these tablets, with those on the lists, is because perhaps we do not translate them exactly as Eratosthenes and Africanus did; the first wrote 2,100 years, back, the other over 1,600.

'When compared with a similar tablet of an earlier date found at Karnak, the two authorities, while they agree in some names, yet differ so hopelessly in others, as to raise the suspicion that one or both may be genealogical rather than historical.' At any rate, it appears to me, they settle the fate of the Hyksôs dynasties. Who the Hyksôs were, and how they got into Manetho's mind, I shall attempt to explain by-and-bye; but here I will remark, it appears perfectly plain to me that Rameses the Great had fifty-two ancestors or predecessors, according to the records existing, when he caused the tablet of Abydos to be made. Sethos his son, of the nineteenth dynasty, added to the sixteen kings of Africanus' eighteenth dynasty, make eighteen kings to be added to thirty-four, where we left the list of Eratosthenes, or in other words, eighteen

added to thirty-four, produce fifty-two. What were the real number of kings according to Manetho, is very hard to say, but they could not be much short of 200, which he gives to the time from Menes to Rameses the Great, which we find reduced by monuments, which 'cannot lie,' confirmed by careful and learned Egyptologists, the earliest on record (for I do not consider Herodotus anything but a traveller), to the number of only fifty-two. After this I think we need not trouble ourselves further with the dynasties *of Manetho*.

Who, then, were the Hyksôs, and what gave cause to their ever entering into Egyptian history? All nations, learned or ignorant, have apparently a natural dislike, if I may so call it, to foreigners; the more ignorant and bigoted they are, the more intense is their aversion, religious differences naturally helping to intensify it. Herodotus tells us the Egyptians hated the shepherds or Hyksôs, because they were associated with traditions of their sufferings when the Pyramids were building, and when the shepherd Philition was received by Cheops. From this, no doubt, arose the very common system among the priests, the only educated class, of putting everything bad against the shepherds. No doubt there were wars with the pastoral tribes of Palestine. But even in Joseph's time, if we are to believe the Bible, the shepherds had no footing in Egypt; the whole account in the Bible is that of Joseph dealing with an Egyptian ruler. It is by no means extraordinary for an Eastern despot to raise foreigners to the post of Vizier. Joseph says his family are an

'abomination' to the Egyptians. Has the Emperor of Russia never had an alien Premier?

We do not find any records of wars before the time of Sethos, the first king of the nineteenth dynasty, with the exception of the records found at or near Beni-hassan, of some hundred soldiers' bodies, who had been slain in Nubia in the time of the twelfth dynasty being buried there in a vault; and we may therefore reasonably suppose that any which did occur, must have been of no very great importance. The records in Wady Maghara, of wars apparently carried on by the kings or princes of the so called fourth dynasty, I am disposed to believe were quarrels amongst the children of Ham, very likely caused by a difference of opinion between Canaan and his brothers, he refusing to go on further west with them, and the dispute ending in a 'faction fight,' as has since happened often with explorers. The first wars the Egyptians carried on, as well as the most continued, must have been with the pastoral or shepherd tribes of Canaan, and no doubt the Canaanites, Jebusites, or shepherds became disliked, or an abomination in consequence, as the English were to the French, and the French to the English, till quite recent times.

The idea of the Hyksôs rule no doubt has its origin in the administration of Joseph, (as Josephus says,) who was an Hyksôs himself; Joseph's three Pharaohs must have ruled subsequent to his elevation to the post of Vizier, up to the accession of Aahmes to the throne over one hundred years, and then an entire new system of government seems to have been adopted. We see also in the disputes between Moses and Pharaoh, these

were then Hebrew taskmasters over the people; Pharaoh says to Joseph, 'Choose out from your brothers overseers of my cattle'; the 'Hebrews,' once placed in authority, no doubt continued in office. This time Manetho has extended to 511 years; probably he found records that the Hebrews or Hyksôs were in Egypt above 400 years, which he assumed as 500, and gave them five dynasties. Here let me remark, there seems a connection between a century and a dynasty, which I shall allude to more at large subsequently.

The more ancient of the two historical tablets is that of Karnak; it represents Tothmes III., or the Misphragmuthosis of Manetho and Africanus, the sixth king of the eighteenth dynasty, offering gifts to his sixty-one ancestors, thus differing materially from that of Abydos, where Rameses, the third of that name, and also (I imagine) the third of the nineteenth dynasty, between whom and Misphragmuthosis there are eleven kings, is represented as offering gifts to, or worshipping his fifty-two ancestors. Again, the tablet of Karnak represents Aahmes, the first of the eighteenth dynasty, between whom and Misphragmuthosis there are only four kings, as having only one between him (Aahmes) and Menes, namely Memnoth, apparently a name compound of Men or Menes, and Thoth his son; thus there could only be *seven* Royal ancestors to Misphragmuthosis; this tablet, therefore, must have been genealogical, and not historical, whereas no doubt the Abydos tablet is an historical record, as seen by its agreement with Eratosthenes and Africanus; however anyone may differ on this point, all must agree that, neither making any record of the Hyksôs, they could not have ever

existed. In his 'Ancient Egypt' (fo. 45) W. Osburn, remarks, 'Amenophis Memnon' (next but one after Misphragmuthosis), has also the title "Smiter of the Shepherds" applied to him, on the celebrated colossal statues which still remain on the plain to the west of Thebes; though there is no monumental evidence that at these early periods of the eighteenth dynasty they were able to make much impression upon Egypt.' May not this epithet be applied to one of the persecuting Pharaohs? If we allow for the eighty years of Joseph's life, the twenty-two years that Mares survived him, and say eighteen before Aahmes began in anyway to show he 'knew not Joseph,'—and perhaps the first exhibition was change of policy, and not persecution,—we have a space of 120 years, and must apply all the persecutions, of whatever degree, the Hebrews suffered to the last fifteen verses of the first chapter of Exodus. A careful perusal of that chapter will show the persecution was a progressive one, beginning with ignoring the services of Joseph. This is shown by building temples; of itself such an act would probably be offensive to the Hebrews, who at that time could not be gross idolaters; this was followed by hard laborious tasks and culminated eighty years before the Exodus, in the royal edict for the murder of the male children. This edict seems to have been made after Aaron's birth. We have here in this title of Amenophis Memnon, a clue to connect Egyptian monuments with the Bible; he may have assumed it in glory of his father, or grandfather Tothmes III. or Misphragmuthosis, for it is very difficult to identify monumental with historical kings. Trevor (fo. 279) says, 'His features, sculptured in a

colossal head, at the British Museum, exhibit decided traces of the negro physiognomy, from his Ethiopian grandmother.' I would prefer to associate the idea of the 'smiter of the shepherds' (Hebrews) with such a character, than the original of the poetic vocal Memnon. We here find, however, another link in the chain of evidence, explaining the mysterious Hyksôs. These Hyksôs, except such casual allusions as the foregoing, have left no monumental record behind them. Manetho gives no names of their kings. Egyptologists have found many names, as may be seen in Smyth, vol. iii. (pp. 331–2); but they seem to me very uncertain; two of them, Apophis and Assis, seem to correspond exactly with two names in Manetho's sixth dynasty, and the twentieth and twenty-first of Eratosthenes' list. The following remind me very much of Jannes and Jambres, who 'withstood Moses,' and I imagine were Hebrews, viz. Jannes of Bunsen's fifteenth dynasty (Smyth, vol. iii. p. 331), and of Osburn, sixteenth dynasty (p. 332), also Annes Lepsius, fifteenth dynasty (p. 331), and Khames of Bunsen's seventeenth dynasty (p. 332). It is curious, Lane's and Wilkinson's names, if any, are not given by Smyth. Do they not give any? Is it to be inferred that they are of opinion the Hebrews and Hyksôs are the same?

I have pointed out that Asses or Assis is very like a name in Manetho's sixth dynasty; some give an *Assa*. Now, as every Egyptologist has his own mode of spelling names, perhaps this is Joseph's eldest son, Man-assah. What more natural than that his mother, a royal Princess, should call him after her great ancestor, whilst we know the whole of the name or names is not invariably

to be found in a cartouche. Bunsen, vol. ii. p. 482, gives the cartouche of one Ra-uben, to me most suspiciously *like Reuben*, Jacob's son. We are told Joseph placed his brothers in authority.

NOTE.

In Bunsen's fifth volume, p. 33, he says, 'The account in Herodotus of the two solar cycles which intervened between Menes and Sethos is not more correct than Manetho.'

Strange—Bunsen did not think, perhaps Herodotus meant two years of 360 years each, not two cycles of 1,420. Could Herodotus make a mistake? Or was it because it did not suit his purpose that Bunsen would not see it, and made this blunder?

I am well aware it is very impertinent of me to write thus of the great German Baron, '*mais, pensons.*'

The Exodus took place in B.C. 1555, some five, six, or seven years after the death of Sethos, in, say B.C. 1561; add two Sothic years, not cycles, 720, entrance of Menes into Egypt B.C. 2281; as my readers go on they will find I come out almost exactly on this date, and as they proceed they will step by step see how I arrive at the conclusion I have come to, and can follow and correct me with great ease.

I unhesitatingly challenge any follower of Baron Bunsen to show Herodotus anywhere refers to 'two *solar* cycles,' of 1,461 or 1,440; I read a 'solar cycle' four times 360, not four times 365¼ years.

The Egyptians had several different years, one of 360 days, another of 365 or 365¼ days. By the first, kings' reigns were always reckoned, and as the kings were royal priests, as was the ancient practice among Eastern nations, and very general, if not universal, with even the Romans, it is but natural to suppose the sacred year would be 360 days also.

In Genesis we find, 'two years of days,' spoken of with

reference to Joseph's term in prison between the butler's and baker's dreams and the king's dreams. It is evident, therefore, they had another year of 360 *years*, or *a year of years*; this is, without doubt, the 'Sothic year—if not "*cycle*."'

In his second book, c. 142, Herodotus says, between Menes and Sethos the sun had twice changed its place of rising and setting, i.e., rising in the west, and setting in the east. He does not say he was told this by the priests, but in no other way could he have learnt such a fable.

Herodotus, in Book ii. c. 141, refers to the defeat of the Assyrians under Sennacherib, related in 2 Kings xix. 9, where Tirhakah is named as King of Egypt or Ethiopia (which name, I believe, was often applied to Egypt), as having happened under Sethos. This, however, could not be the Sethos of the nineteenth dynasty, father of the king who was drowned in the Exodus, even if there was a Sethos reigning at the time of Sennacherib.

Whether Herodotus himself made this mistake, or his informers, we need not speculate upon; my object is merely to point out this error of Bunsen. He says, 'Sethos formed, in the Egyptian tradition (misunderstood by Herodotus), an historical epoch;' and well he might, dying so near the Exodus.

As for Egypt being conquered at that time by Ethiopians, when able to contend against Assyria, it is highly improbable. We find the Egyptian forces of Xerxes are called Ethiopians by Herodotus; perhaps it is impossible to say when the term 'Egypt' was first applied to the land.

In his second volume, p. 258, Bunsen quotes from the Turin papyrus one Sebek-nefru, who reigned jointly with Amen-m-ha IV., '3 y. 10 m. 4 d.' We can see this proves the value of our 1, 2, 3, and 4th, for these reigns.

The thirty-seven Jebusites are introduced to the king in the sixth year of his reign; Joseph told his brethren there were *five* more years of scarcity to come; two, therefore, and four of plenty, had passed in this reign, and three of plenty in the time of the previous king; adding one year for the needful preparations, we have the *very exact* time before

us when Joseph was appointed vizier. I ask, can anything be plainer?

This king, then, is Amen-m-ha I., not IV:

It also shows there is an immense amount of truth in this Turin papyrus, which has been much abused.

NOTE ON I-SUPH'S TOMB.

In Osburn's 'Israel in Egypt,' p. 174, we have, 'There are at Sacchara, immediately over against Memphis, the ruins of a tomb of a prince in Egypt, whose name was Joseph, written in hieroglyphics. . . . The titles and offices held by this personage were also those of Joseph. He was (hieroglyphic) chief "abrech," Gen. xii. (here I think Osborn in error), 'and director of the granaries of all Egypt, as well as possessor of several other offices. The name has been assimilated to an Egyptian phrase expressive of Joseph's function in Egypt (hieroglyphic), *i-suph*, "he came to save;" Coptic, "he will save."'

NOTE TO CHAPTER II.

Many writers have doubted if the reported numbers of the Israelites could be correct; we have a similar case of increase in our own times. The census returns of the United States prove the slaves in the pure slaveholding States, leaving out the district of Columbia, and they can scarcely have been said to have been *blessed*, between 1790 and 1840, or 50 years, increased from 607,527 to 2,481,536, or doubled twice; that is, they doubled in twenty-five years.

The Israelites were in Egypt 430 years; double seventy seventeen times, and see the result.

Some negroes *may* have been imported, we know not how many, or how many escaped, or left with the British troops in 1815—that is twenty-five years before 1840.

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CHAPTER III.

HISTORICAL COSAS — *continued.*

LEAVING Manetho's mysterious dynasties, let us return to Joseph, a much more agreeable subject to dwell and reflect upon.

With all my heart I wish one of the respectable Amen-m-ha family filled the throne of the British Indian secretary; perhaps then there might be a chance of a modern Joseph being placed as viceroy, or second in the kingdom in India; the blessing of irrigation works, which have done so much for Egypt, would be a large boon to India.

There are at Semneh, on the Nile, records which I imagine no one will deny refer to observations connected with the river's rise. See the letters of Lepsius from Egypt, and among them we find the cartouche of Amen-m-ha and one Sebek Hotep side by side; and Lepsius cries, 'It is as I supposed: the Shepherd Kings, the *Sebek Hoteps*, followed the twelfth dynasty;' the cartouche of Sebek Hotep being simply that of '*Lord Joseph*,' vizier or second in the kingdom (this fact being established by the king's cartouche associated with it), when on a tour of inspection and examining the state of the river, recording the height of the inundation, in a certain year of the king's reign.

I believe all Egyptologists are agreed that the

second cartouche came in with the twelfth 'dynasty,' under which Joseph was made second in the kingdom. Is not this a corroboration of the biblical narrative?

Manetho addresses his work to Ptolemy Philadelphus *Sebastos*, equivalent to a term like Augustus or Gracious.

Can it be the original of the 'Ab-rech' in the margin of our Bible, rendered 'bow the knee,' pay respect to the vizier?

Bunsen gives several *cartouches* in his second volume, of Sebeknofres, that is, *good Lord*, as well as Sebek Hpet or *Lord Joseph*. As it is very easy to write the same word by different characters in hieroglyphics, he fancies each cartouche in a different character means a different Sebek Nofre, or Sebek Hpet, never thinking that in those very far bygone times sons never were named after their fathers.

But again, did Jacob mean 'a supplanter?'—the interpretation I believe universally given to his name, probably because Esau said he was well named Jacob, having supplanted him twice. Rebecca was told, the 'elder should serve the younger;' the word serve implies 'labour for;' in other words, the younger was to be the superior or lord over the other. In those times, and long after, there were only two classes, *the lord and the labourer*.

In all these points let us keep in mind how many years ago it was, how languages have expanded, and how these words come to us through two or three different languages.

At the same time, each indicates that the Sebek Nofre, or Sebek Hotep or Hpet, was the Joseph, son of Jacob named in the Bible.

Bunsen, vol. i. p. 418, says, 'Sebek or Sevek' may be read *Kebek.*

Joseph's whole system seems to have been a study to improve the land and make it more fertile—very different from the usual ideas of Eastern viziers. His Pharaohs respected and trusted in him, and in consequence the king became enormously rich and extremely powerful. Previous to his time, Osirtasen I., either the first of Joseph's Pharaohs or his father, had begun works of embellishment at On, or Heliopolis, one obelisk of which is still standing as a monument of what some may call his folly, but from the time of Joseph to the twenty-second year of Aahmes, the 'King that knew not Joseph;' and what can explain that expression more clearly than an entire change in the system of the kingdom? We find no money or labour, or little, wasted on useless, unproductive, though magnificent temples, but all on the land, and the means of making it more fertile. Aahmes begins in his twenty-second year by erecting a temple to his idols. In Col. Vyse (vol. iii. p. 99, edit. 1842), I find the following with reference to inscriptions in the Massara quarries.

'The earliest tablets are of Amasis' (first of eighteenth dynasty); 'but his immediate successors are not noticed.

'Beneath this inscription, a block of stone, drawn on a sledge by six oxen and attended by three drivers, s represented. The tablet records the fact that the quarries, which had been begun in the forty-third year of Amen-m-ha, probably the fourth,' (this, I beg to suggest, is more likely to be Amen-m-ha III., or Mares, Joseph's last Pharaoh, and the immediate pre-

decessor of Amasis: he reigned forty-three years), 'were worked in the twenty-second year of Amasis, apparently for the same purpose, viz., the building of the temples of Phtah, and Amon at Thebes.' Supposing the Hyksôs reigned between the twelfth and eighteenth dynasties for 511 years, is it at all likely that the first king of the eighteenth dynasty would, 533 years after the death of his ancestor, record the fact that these quarries had been opened by him that exact number of years before? Is it not much more likely a king should record such a fact of his immediate predecessor, his father or grandfather? 'These tablets seem to be the earliest records at present known respecting Thebes, which city acquired importance in proportion to the conquests of the Egyptian kings, and superseded Memphis as the capital of the whole country, on account of the comparative superiority and security of its situation.' Perhaps in consequence of the formation of Lake Mœris, Joseph's works can be easily traced even now, nearly 3,900 years after they were planned. The construction of Lake Mœris and the erection of the mounds, which stopped the waste of the waters by the Bar-be-la-mar, and thus turning the current, directed the deposit of the mud more towards the Delta, have so elevated that province as to change it from a morass to what it now is (Herodotus describes the shore of Egypt as a swamp). This is evident from the amount of deposit above the masonry in Lake Mœris, which Lepsius states is from 40 to 50 feet; the deposit also round the colossal statues of Rameses the Great cannot be less than 30 feet, and we may assume the middle of his reign to have been circa B.C. 1520. Surely such

facts as these show the wisdom of Joseph, mentioned in Genesis, where he is described as moving the people from one end of the kingdom to the other. In a note to c. xiii. of Rawlinson's Herodotus, fo. 16, I find G. W. says, 'It is reasonable to suppose by Mœres, he (Herodotus) would refer to that king who was so remarkable for his attention to the levels of the Nile, shown by his making the lake called after him, and who, from the records at Semneh, is shown to have been Amen-m-ha III., who lived about 1,500 years before the historian.' As Herodotus had finished and read his travels, B.C. 445, this would put the time of this King circa B.C. 1955–1945. I make him to have ascended the throne B.C. 1936.

None of my readers will say I am over disposed implicitly to follow Baron Bunsen; but if any one will turn to his second volume, p. 470, he will find there, 'In the first place, the works of the Sevek-hophis (Sebek hopets) are not of such a character that they could only have been accomplished by independent kings of all Egypt. *Strictly speaking, there are no palaces at all* (the italics are mine), *or similar public* buildings of that Theban race of Princes in existence.' Lepsius calls them 'shepherds,' and Bunsen in many other places follows Lepsius, though he here calls them Theban. 'The inscriptions in which the names of their kings are found are *one and all* (italics mine) those of officials and other private persons in which a king is only incidentally mentioned, and in the present instance exceptional notice is taken of a building.'

These last words refer to what he says p. 469. 'There is an inscription on a rock on the primeval site,

where the exploits of those great Sesertosidæ were performed, where a man, an officer of Sevek-hept I., mentions a building of the third Sesertosis, which was committed to his charge.'

Bunsen gives us nine characters which represent the same sound. Take an extreme case: let Joseph's titles be written with each of these *nine* characters; let one Sesertosis be written with these nine characters, on nine different cartouches: we have *nine* Josephs, and *nine* Sesertosidæ, or perhaps $9 \times 9 = 108$ kings and viceroys. Let any one pick sense out of Bunsen's observations, and they *must* agree with me. But Joseph made also canals: one bears his name to this day, the Bar-Jusuf; some say this is the work of a Mohamedan Calif: I cannot think it; people who would burn Alexandrine libraries are not very likely to take the trouble to make canals; besides, there is the report of Herodotus. The author of 'Egypt,' in Smith's 'Bible Dictionary,' says the name was given from the Sultan Joosuf-Salah-ed-deen, who repaired it. It is very evident, from the records found at Lake Mœris, that the lake was made by one of the Amen-m-has. Vyse says, in his 'Pyramids of Gigeh' (vol. iii. p. 81), 'The arrangements of the water at this place, and particularly those at the Lake Mœris, are important, because they regulate the inundation of the whole country. The water is brought down by the Bahr-Jouseff, and by means of a sluice, the remains of which are visible near the entrance of the canal; the current was originally turned through a lock, and through several small sluices to the westward of it, into the Faioum.' This is conclusive that the Lake Mœris and Bar Joussef were built in connection with each other. 'A bank or dyke, composed of

uncut masonry, and now called Gisr-e-Sultan, confined the inundation between the river and the mountain, and is furnished with various small sluices, by which means the water could be regulated with the greatest accuracy.' This, probably, is why the writer referred to, supposed the works of this sultan gave the name to the river; but Colonel Vyse appears to distinguish between the two. Again, p. 82, he says the Bahr-Jousef is also called the Bahr-el-Faioum. 'Near the village of Howara-el-Gusab it flows in a narrow channel which has been cut through the rock, and at one place is of small dimensions, adapted for the application of a bridge or of a sluice, by which the water may have been directed into an adjacent ravine, which Mr. Perring supposes to have been the canal called by Pliny "Fossa Grandis," and said by Strabo to have been connected with the lake.'

If Mr. Perring is right—and I do not know why he may not be—we have good proof that this Bar Jousef existed before the time of the Kalif Joosuf Salah-ed-deen.

From our present knowledge of volcanic power it is by no means unreasonable to suppose the years of plenty and famine recorded in Genesis were in some measure caused by an earthquake. Thus, an earth wave opening the passage at Semneh and allowing the waters of the great lake or morass to drain away for a time, increased and subsequently reduced the rise of the river to what it is now. Vyse says there are evident marks at Gigeh that at one time the river rose higher than at present. Perhaps also the land was raised, but Joseph saw the changes going on, and pro-

vided against them by moving the people into new localities.

Another canal was made towards the Isthmus of Suez, in the same direction, and perhaps by the very same route the French Company have made their 'Sweet Water Canal,' likewise others in the Delta. These works are attributed by Herodotus to King Sesostris, which certainly corresponds with Sesurtasen; and his letting out the whole land of Egypt in rents, nearly corresponds with what Joseph is described to have done, in sacred writ. Compare the history given to us in the Bible with what Herodotus learnt from the priests, and there can be no doubt but the Sesostris of Herodotus was one of the Pharaohs of Joseph; the circumstance of the land being let out on rent is quite sufficient to prove it, even if we had not the rock records of Joseph, showing he closely watched the height of the inundation. I am not aware if other kings besides Amun-m-has are to be found among these records; if not, there will be proof they were confined entirely to the time of Joseph: the resemblance between Sesostris and Sesurtasen cannot be accidental. But to leave Joseph, let us in passing reflect a moment if the wars which Rameses the Great carried on in Palestine, of which there are abundant records in Egypt, and which seem to have extended over the whole of Palestine, and from which, no doubt, as was the custom of those times, all or nearly all the population were carried away slaves, must not have left the country utterly unable to withstand the inroad of the Hebrews when they crossed the Jordan? In Exod. xxiii. 28 we have, 'And I will send hornets before thee, which shall drive out the Hivite,

the Canaanite and the Hittite, from before thee.' Again, Deut. vii. 20, 'Moreover the Lord thy God will send the hornet among them, until they that are left, and hide themselves from thee, be destroyed.' This is corroborated by Josh. xxiv. 12, 'And I sent the *hornets* before you which drove them out from before you, even the two kings of the Amorites, but not with thy sword, nor with thy bow.' The bee, wasp, or hornet, is one of the crests found on the cartouches of nearly every Egyptian king. May not, then, Joshua have alluded to the king as a hornet, as we speak of the *Bear* the *Double-headed Eagle*, or the *Crescent*? Has no threat ever been made to drive the 'hated leopard into the sea?' Does not Scott speak of the Knight of the Fetterlock? Were not, in days of chivalry, knights known by their crests?

Also in Isaiah we have, 'And it shall come to pass in that day, the Lord shall hiss for the fly that is in the uttermost part of the rivers of Egypt.' We find the double crest of the flying insect, whatever it represents, and the broken reed, on even the cartouche of Menes. These are generally supposed to represent the *two* Egypts, Upper and Lower; but in the days of Menes there could have been no settlement in *Upper* Egypt. Is it possible they mean Cis and Trans, or Egypt and Arabia? They are both known in the Bible as the land of Cush. Osburn in his 'Ancient Egypt,' chap iii., says Sethos I., Rameses II. (my Exodus Pharaoh), and Rameses the Great, or III., all carried on wars against the Canaanites; the last invaded the country in his fifth and twenty-second years, this last being eighteen before Joshua crossed the

Jordan. It has been asked how these wars could have taken place, and yet there be no notice of them in the Bible? The answer is, that they took place during the forty years wandering. The Bible gives Jewish, not Egyptian history. Rameses the Great, who reigned sixty years, being the king succeeding the one drowned in the Exodus, no doubt at once made an attack on Canaan, partly, perhaps, expecting to meet the Hebrews there, partly to get slaves to replace the lost labour of the Hebrews. We are told in Exod. xiii. 17, 'that God led them not through the land of the Philistines, although that was the nearest, for God said, Lest paradventure the people repent *when* they see war, and they return to Egypt.' Observe the *when*. There is one other point I will notice, and then return to Jacob's entry, and go backwards. Lepsius in his Letters, (fo. 27, Horner's translation) states that among the kingly or royal records of the eighteenth dynasty he finds mention of one Amenophis (IV.) whose cartouches have nearly all been effaced, 'who during an active reign of twelve years endeavoured to accomplish a complete reformation of all the secular and religious institutions, and aimed at no less a thing than to abolish the whole religious system of the Egyptians which had hitherto subsisted, and to place in its stead the single worship of *the Sun*.'

He seems to rouse the old Adam of the learned Prussian doctor, for he twice alludes to him as a 'puritanical reformer.'

Can this be Moses? and can this be the reason why he left the court, or, at any rate, the Egyptian version of it?*

* In the fifth volume of Bunsen's 'Egypt,' there are the translation of two inscriptions given respecting the restoration of 'the great foundation

Doubtless his mother, as his nurse, had instilled into him the belief of the Israelites as far as she knew it, part of which was, that God would visit them and free them from slavery. He was educated as a royal prince, and we are told was 'learned in *all* the wisdom of the Egyptians.' Part of the duties of royalty was the office of Priest. Nearly all the learning of the Egyptians was connected with their religion; part of this must have been the sacred books, which the Priests showed to Herodotus, said to have been written by Cheops, and which Africanus says he was possessed of, which, through lost, may hereafter be discovered amongst papyri. Moses, too, is described as having been mighty in word and deed. Josephus considers this to relate to his conduct as a General in wars against the Nubians. Very likely; but may it not also apply to other deeds Josephus was not acquainted with, and which these stone monuments have revealed to us?

Supposing Moses to have started as a reformer at the age of twenty-five—twelve years' labour, and two years for the two incidents which are related of him in the Bible—we have the age at which he went to Arabia.

Perhaps it will be said I am speculating and indulging in '*cosas*' (fancies); if so, I am not the first, and probably shall not be the last, who has had his Egyptian 'cosas.' It seems to me a clear and manifest demonstration how the Almighty makes tools of men. Here are a parcel of idolaters educating and preparing one of the principal chiefs, who is to be made use of to declare the truth, and eventually to upset their lying

of Dendera,' of the time of Cheops, which had become decayed (*or neglected*). Probably these refer to what Lepsius alludes to.

system. Certainly it is a visible sign of 'His wisdom which is past finding out.'

But now we will go back to Jacob, and the time before him. After the Exodus there are not many points where Biblical and Egyptian history meet, and then only for short periods. I made Jacob enter Egypt in B.C. 1985, and according to Usher, Abraham visited Egypt 215 years earlier. Is he right? I believe there is an error of fourteen years, and will explain why I think so.

In Gen. xxv. 26, Isaac is said to be sixty when his sons were born: I believe he was seventy-four.* In Gen. xxxv. 18, we have the account of the death of Rachel, on the way to Ephrath; Jacob continues his journey, and in verse 27 joins Isaac, who subsequently dies after —but not long after—the birth of Benjamin. The thirty-sixth chapter makes no mention of Isaac. The next opens with the present of the coat of many colours to Joseph, he being then seventeen, and from that time forward, though various incidents in Jacob's family are related, there is no mention of Isaac. I can come to no other conclusion than that Isaac died when Joseph was sixteen. Now, as Jacob was 130 and Joseph was forty when they met in Egypt, Jacob must have been ninety when Joseph was born; and Joseph being sixteen when Isaac died, Jacob was 106, Isaac being 180; he must therefore have been seventy-four, not sixty, when his sons were born. This makes Abraham's visit 229 years before Jacob's entry. Remembering that Jacob

* I know it is very dangerous to pretend to dispute the words of Scripture—I do it with much doubt—but I believe the meaning is, he was not less than sixty. How could the writer of Genesis '*guess*' any one 4,000 years after, would be so very hypercritical.

entered Egypt B.C. 1985, in the sixth year of the reign of Osirtasen II., if we go back 229 years on the list of Eratosthenes, we find ourselves in the reign of his king No. 20, Apapus, or Ἀφώφ, the Phiops of Manetho's sixth dynasty, twenty-seven years before his death. Thus all the dynasties of Manetho, between the sixth and the close of the eleventh, resolve themselves into a space of not more than 150 years. Here we have the middle of Manetho's sixth dynasty, in the year B.C. 2214, but Lepsius places the commencement of the sixth dynasty in B.C. 2744; Bunsen in B.C. 3054*; Lane, &c. B.C. 2200; Osburn in B.C. 2107. Allowing for the reductions I have made already in the list of kings before Phiops, according to the list of Eratosthenes (let me here remark, I feel it may be further curtailed), we have Menes' reign commencing in B.C. 2518.

There are four kings in the list of Eratosthenes, between Phiops and Saophis, or Suphis, who has generally been assumed to be the builder of the Great Pyramid, and to answer to the Cheops of Herodotus, in consequence of his supposed cartouche having been found in the 'Attics' by Colonel Vyse, in his explorations. But I am disposed to think that Phiops will answer better to the name of Cheops; the difference in sound is nothing great, and we must remember the two names were conveyed through the means of interpreters at least 200 years apart, to two different Greeks, one of whom was a native of the Greek colony of Asia Minor. Phiops or Pheops easily becomes, in the course

* In his fifth volume, p. 63, Bunsen puts Apapus in B.C. 2490–2391 for his 100 years' reign. Here we are 204 years only apart.

of 200 years, by different interpreters, Kheops, which in the Ionic dialect is Cheops.

Again, Herodotus tells us, the priests related to him that when Cheops was building his pyramid, one Philitis, a shepherd from Canaan, visited him, was well received, and returned into his own country. Does not this exactly correspond with the Bible's account of Abraham's visit to Egypt, and yet farther prove that Phiops and Cheops are one? Philitis and Abraham, both shepherds, came from and returned to the same country, both favourites of the king, and as, doubtless, Herodotus thought the Philistines sprang from Philitis, both progenitors of a nation.

If this is the case—and I do not see that any other person is likely to be found to correspond with the Philitis of Herodotus—then, according to universal acknowledgment by all Egyptologists, that Suphis or Saophis and Cheops are one and the same person, we have Abraham's visit to Egypt corresponding with the date of the building of the Great Pyramid, and the commencement of the fourth dynasty of Manetho, in B.C. 2214. In this case, as there are only two kings between Suphis, Saophis, Cheops or Phiops and Menes, according to my corrections, namely Athothis, who reigned fifty-nine and Ansyphis, who reigned twenty years, we shall find, by adding the sixty-two years of Menes, and the sixty-three years of Phiops or Suphis to them, there could not be *more* than 204 years between the first year of Menes and Abraham's visit, which being in B.C. 2214, puts Menes in B.C. 2418 *at a maximum*, against B.C. 2350 of Josephus. Here I must say I cannot understand Archbishop Usher's chrono-

logy; he makes the Deluge end 2348, and Abraham born in 1996, two years after the death of Noah, in 1998; but the chronology of Gen. xi. makes Abraham born 292 years after the Flood, or in B.C. 2056, and not 352; 292 years after the Flood, according to Usher, fall in 2056, not 1996. If Abraham visited Egypt in 2214, and was then seventy-five, he was born in B.C. 2289, and not B.C. 1996. Menes, therefore, seems not to have preceded Abraham much above a century. Peleg was born 190 years before Abraham, and supposing the dispersion took place in the middle of his life (he lived 239 years), it would happen in B.C. 2359, or fifty-seven years after Menes began to reign. But many commentators put the date of the dispersion earlier in Peleg's life.

Those commentators who adhere to the LXX have put the dispersion when Peleg was *ten* years old, but it certainly seems to me to be straining the text very much to do so. Suppose the dispersion took place *during* his life, one would not expect this to refer to a time before he was in his 'teens,' his father and grandfather both living. Such an expression must apply to middle life, or to some event which happened and caused his name. Peleg, I believe, means 'division.' In Gen. x. 25 we are told the *earth* was divided in his days.* Can this imply a rupture in the continents of the earth?

Usher in one verse puts Abraham born in B.C. 2056, in the next in 1996. Was he confused between a desire to make Abraham born after Noah's death, and to have him leave Haran after the death of his father Terah?

* Scipio *Africanus* was so called from his African victories; but Peleg does not appear to have been prominent in the dispersion.

Here springs up the question, Was Abraham Terah's youngest son, and has he been put first by way of honour? I believe he was Terah's youngest son, and Shem was Noah's. This last is evident from the position in Gen. x. of their genealogical record. Unless Shem and Abraham are the younger sons of Noah and Terah, why are the other sons named? they are not concerned in the record of the descent of the Hebrews. In Gen. x. Shem is described in words which may be translated to read he was Japhet's elder brother, or that Japhet was the elder.

According to Gen. xi. Abraham was born, if the dispersion took place fifteen years after Noah's death, seventy-three years before that event, to have left Ur when he was married, with his father. Both in the case of Noah and Terah we may suppose there were no other sons than those recorded. I fancy Terah chose to leave Ur, where St. Paul says the promise was made, expecting his son would at once have it fulfilled. When Terah was seventy, none of the Post-diluvians having died, no doubt he looked forward to the same length of life as before the Flood.

Abraham must have left Haran when his father was living; he was called on to leave 'his *father's house*' as well as his kindred, and we know he was disposed to obey God's commands. He would not be directed to leave his father's house if it was intended he should wait till his father was dead.

Archbishop Usher might have got out of his difficulty in another, and it seems to me a much simpler way; a small change in the position of a few words in the 10th and 11th verses of Gen. xi. make a material alteration in

the chronology; they are as follows: the Bible has, in Gen. xi. 10, 'These (are) the generations of Shem. And Shem (was) one hundred years old, and two years after the Flood begat Arphaxad.' Verse 11, 'And Shem lived after he begat Arphaxad five hundred years, and begat sons and daughters.' Whether we perfectly understand the idiom of the old Hebrew scribe, or whether the position of the words have been changed among copyists, it is impossible to say; but it seems to me, the meaning is that Shem's age is to date *from and after* the Flood, *as if living a new life*, and our translation would more correctly convey the meaning thus: 'These (are) the generations of Shem, five hundred years. And Shem, one hundred and two years old after the Flood, begat Arphaxad. And Shem lived after he begat Arphaxad, and begat sons and daughters.' It seems to me, here is the key to the confusion in Usher's two dates for Abraham's birth; it is true he makes only sixty years' difference, and mine is 100; but how could he get two dates unless from some Hebrew tradition, or some ancient commentator? By the words of the Bible, Abraham would be born in B.C. 2056, according to Usher's date of B.C. 2348 for the exit from the ark.

	Years.
Thus, Arphaxad born after Flood . .	2
Salah after Arphaxad	35
Eber „ Salah	30
Peleg „ Eber	34
Reu „ Peleg	30
Serug „ Reu	32
Nahor „ Serug	30
Terah „ Nahor	29
Terah at Abraham's birth . . .	70
	292
Add . . .	2056
Date of exit from Ark . . .	2348

Again I say, unless Abraham '*was*' Terah's *third* son, why are the others named? they have nothing to do with the genealogy of the Biblical characters.

I am well aware as the Hebrew text is, it will not bear the interpretation I propose. But before I am condemned for supposing some transposition of words may have been made—for I have not altered, left out, or inserted a single one—let the person so disposed to condemn me read Bishop Newton's remarks on the curse directed by Noah against Ham or Canaan. I only differ from the learned prelate in supposing Canaan was Ham's eldest, not youngest son, and am disposed to believe, at the time the event took place, none of Ham's other sons were born. Perhaps Noah, in cursing Canaan, cursed all Ham's posterity. In support of my view of the change proposed, I beg to observe that in Gen. x. 22 Arphaxad is named in the middle of Shem's *five* sons. Are we to suppose three sons were born in twenty-four months? Such cases we know do happen, but they are exceptional. If Shem's age is to be counted from the Flood, as if he was born again after that catastrophe, probably his eldest son was born about thirty years after the exit from the ark, as was the case with all the recorded generations; and therefore we may suppose his third son to be born about a century after that catastrophe. The births recorded in Gen. xi. are about thirty years apart.* Again, by this change Peleg was born 201, and died 440 years after the Flood, and ninety years after Noah. Thus the dispersion could well happen in the middle or last half of

* Terah has three sons at seventy years old, life having been curtailed one-half.

Peleg's life, and after the death of Noah, which I am well satisfied must have been the case. Gen. ix. ending with the death of Noah, and the insertion of the genealogical record following in Gen. x., appears distinctly to indicate that all events subsequent are to be considered without reference to that patriarch.

It has been often suggested that Moses had some records to aid him in writing the Book of Genesis; perhaps the first ten chapters of Genesis were written separate from the rest. Is it possible they form a portion, or the whole of that sacred book of Cheops, to which I have before referred?

If this be so, we shall find some mention of Cheops or his contemporaries in Gen. x. Can we find any such record in Egypt? I at once answer decidedly—Yes.

I can point out decided and distinct marks of nearly every name recorded in Gen. x. 6 & 7, as found in Egypt, either on monuments or in unmistakable names of places, showing they were derived from early settlers. First, we have Mizraim and the modern Misrs of the Arabs; but may not the name be found in Men-che-res or Men-che-ra? Mizraim (or Mezraim in the LXX., probably showing they thought the correct vowel to be *E*), a dual noun, becomes Miz, or Mez-ra, King-Miz or Mez, against King-Men-che. Now, though the English call the final letter of the alphabet '*zed*,' their cousins over the Atlantic call it, '*zee*,' which, with a nasal twang, becomes '*nche*.' In this way one name is easily transposed into the other. The question to be decided is, will it pass? Suppose the name Men-che-ra is Men-zee-ra, or Ra-men-zee, can it be Zee, son of Men, or Menes? We may see further on.

As the Philistines were descended from one of the sons of Mizraim, have we not the clue to the name given by the priests to the shepherd who came into Egypt during the building of the Great Pyramid, from that country? Canaan, we know, stopped in Palestine. Cush, I find, in that name, read Cufu, Suphis, and twenty other ways, containing never more than six letters, and at times only four, read twenty different ways, each beginning with something very close to *Cu* or *Chu*, and two-thirds ending with either an *s* or *sh*. It will then be said Cush and Cheops are the same. I think I shall be able to show they are not. I do not consider it positive proof he built the Great Pyramid because his cartouche is found in the 'Attics' or *his supposed cartouche*, where also a cartouche read Nu Suphis or Num Suphis is also found. But we can find traces of all the descendants of Cush, with the exception of Havilah and Sabtah in Egypt; the first, no doubt, settled in the Delta of the Euphrates, the second in Arabia. *All* the land west of the Euphrates was the '*Land of Cush.*'*

Seba may be found in Sesor or Shura, of Wady Maghara, and the monuments in the valley of Seba-biâr or bhar, near Suez; in Saba-doleb, a village; in the remains of Seba-ghurra, alluded to by Lepsius; in Soba, the capital of the ancient kingdom of Aloa; in Thebes, Theba, Seba, and in the deified hero Seb or Sevek—to say nothing of the Biblical expression of 'Ethiopia, and Seba,' probably meaning Arabia and Africa. Raamah is to be found in the district where Joseph settled his family, viz. Rameses, as well as its being a favourite name of Kings. May

* An or Amsyphis, or Suphis, is Suphis Suph, or Cush, son of Am.

not Raamah be found in the Pyramid of Reegah, described by Vyse in his third volume, and also in Eratosthenes' Tægar, Raamah Reegah, Tægar? or will Seba be preferred? There is also the King *Ramosis* of Eratosthenes, who may be Raamah, in which case Tægar must be given to Seba. The sons of Raamah, Sheba and Dedan, may be found, the first in Shafra of the second Pyramid, the Cephren, or Cephrenes of Herodotus, and by some made Sephuris. Dedan I trace to Aden, once a great commercial emporium, where now we use tanks for collecting water made many centuries since, and where Chinese remains are at times found.*

There remains but Sabtecha, who I fancy without much trouble can be converted into Tabtecha, or Tatchera, a name found both in the monuments and in Wady Maghara.

The fourth son of Ham, Phut, has often been supposed to be found in the idol Phthah. Osburn also, in his 'Monumental History of Egypt' (fo. 310), mentions a tomb where the name Ra-Phut, King, Melek, or Prince Phut is found. Is he not also the Thoth or Thut of the Wady Maghara and the monuments; the Athothis of Manetho, and Eratothenes, the son of Menes? and if so, is not Menes or Men, the son of Noah, our Bible's Ham? Is it possible the very magnificent tomb to Prince Me-rhet is a mausolemn of Phut, or Thoth, Ham's son? Does Me-rhut mean Rhut, or Phut son of Ham? This tomb is described at length both by Lepsius and Osburn.†

* Perhaps Sheba settled at the head of the Gulf of Akaba and founded Ezion-Geber, the *Kingdom of Sheba* of Solomon's time.

† The characters M-RHT may be read Me-Rhet, or Ma-RHet, or R-Hat, or also AM-RHET or AM-RHUT.

Men can be very easily converted into Hem, and in old Egyptian or hieroglyphics, *m* and *n* were interchangeable.

The city of Heliopolis (of the Sun) or On, is often described in the monuments as An or Am. Does not this look as if it was named from Ham? Ra being 'The Sun,' it would appear as if he was 'Ra,' from whom all the Pharaohs claimed descent. 'The son of the Sun,' 'The well-beloved of the Sun,' were titles often used.

We find the ancient Egyptians had eight primary divinities, three of whom were female (Manetho says all the Egyptian gods were deified mortals); they were Ra, *the Sun*, probably the founder of the nation, under this form, perhaps, a worship of the luminary;* Nu, Num or Nef, supposed to be Noah, Amon or Hamon, as the Romans wrote it, the Greeks having no letter H, but only breathings, Ptha, who is generally recognised as Phut, and Khem, from whom the land took its name, and who Diodorus says was the builder of the Great Pyramid, by name *Chem-mis*, corresponding with Cheops or Phiops. Though resembling Ham, it is very plain from Herodotus, the priests did not confound Menes and Cheops, or Chemmis; they said under Cheops the temples were shut, and he was very irate against the gods. This, probably, is the version of the priests, in order to conceal the fact that idolatry was opposed by Cheops, and temples only, perhaps, subsequently opened. They said he was converted, and before his death wrote a sacred book,

* Plutarch says the ancient Egyptians looked on *Ra*, or the Sun, as 'mundi mens.'

which was shown to Herodotus. Now, here we have no confusion with Men or Menes; then who was this Aphoph, Phiops, Cheops, or Chemmis? He was our Biblical Shem.

The alteration I propose in the place of certain words in Gen. xi. 10, 11, does not increase or change in any way the age of Shem after the Deluge, but, making Abraham's birth one hundred years later *post diluvium*, will cause him to visit Egypt thirty-three years before Shem died. We find he arrived in Egypt twenty-seven years before the death of Phiops; but the next but one on the list of Eratosthenes is Nicotris, who reigned six years, and is well known to have been the widow of Mycerinus, or Menceheres, who according to the list died 168 years before Phiops; she ought therefore to precede Phiops, and *not* follow him. In this case we have Abraham visiting Phiops or Shem in the very year the Bible (if my correction be allowed) would indicate, thirty-three before his death. It appears to me, these points of circumstantial evidence (and it is the only kind of evidence which by any possibility can be found) are too strong to be resisted. They would hang a man charged with murder.

In Rawlinson's 'Herodotus,' vol. ii. p. 345, Sir Gardiner Wilkinson speaks of the cartouche of Papi, the Phiops of Manetho's sixth dynasty, being found at Chenoboscion, together with Merenre and Nofre-ke-re. Now Nofre is good, therefore Nofre, ke, re is 'good king, ke or che'—or the so-called Men che ra of Manetho's fourth dynasty, our Mizraim, or as the LXX write it, Mesraim. Is it possible that Meren-re is another way of writing *meen*-re? If so, we have Phiops and

Meen, or Menes, as contemporaries, as Ham and Shem would be. Wilkinson says also, the cartouche of Papi can be found in the Sinaitic peninsula; as these inscriptions are in general given to the fourth dynasty, we have the fourth and the sixth contemporary, if not the first also; but further, he relates that a king of the eleventh dynasty Sken-n-re, according to Brugsch, is mentioned in a papyrus to have censured Papi, (who ruled in Lower Egypt) for favouring the shepherds.

If this king Sken-n-re was contemporary with Papi, who again was contemporary with Menchere of the fourth dynasty, and probably also with Menes of the first, we have the first, fourth, sixth, and eleventh dynasties all contemporary. Of what value, then, are the *so-called* dynasties of Manetho? None. And as I hope to prove hereafter they were *not* dynasties at all; as Apollodorus said.

But in our Bible we are told, 'Pharaoh entreated Abraham well for Sarah's sake.' I have tried to prove Cheops, Αφωφ or Papi, to be this Pharaoh. Herodotus' story is to the same effect as the Bible; and now we find a papyrus telling the same tale, but a very different one from Manetho's fable of the dreadful shepherds, who did so much mischief in Egypt.

Again, in Wilkinson's 'Ancient Egyptians' (vol. iii. p. 282) we have an engraving of the figures of two kings (the original is on the Cosseir road). At p. 283 he speaks as if he thought they might be the same persons under different names; *but small as the engraving is, the countenances are quite different.* Can this be accidental?

We trust to difference in faces on coins, to prove a difference in kings; why not statues?

The name of one king is Mai, or with the Sun, Ra-*Mai*; but possibly the Sun is a mark of precedence. The other Papi, *no* Sun—to mark inferiority, no doubt. The characters representing vowels are *all the same*; should not they all read *a*, or the same vowel?

I fancy they should, for Wilkinson says this Papi is the Apap of Eratosthenes.

Reading both with '*as*'—and we cannot suppose diphthongs so early in use,—we have Ra-Maa and Papa; reversed we have Aam-Ra and Apap, or Ham and the Phiops of Manetho. I say reversed, that is, placing the vowels before the consonants.

This Papa I assert to be the Cheops of Herodotus, the Shem of our Bible; he is described as beloved of the gods. Why not 'beloved of God?' Attached to the figure for God are Ξ or *three gods*. Is there here any correspondence to Noah's words, 'The Lord God of Shem?' or 'The Elohim of Shem?'

Again, it seems to me, without much straining, the common mode of reading hieroglyphic characters, that the hieroglyphics we read M-N-ai, and apply to Menes, may be read, 'Aam son of Noah.'

All hierologists agree, the M and N to be interchangeable; thus, as the characters of the two vowels are the same as those on the Cosseir road, we have two '*as*,' not *ai*. With these changes, and reversing the reading, we get Aam N—supplying a short vowel, Nu or No, or in other words Aam or Ham, son of Nu, or our Noah.

In his Ancient Mythology, Bryant says Μην or *Meen*, (the title of the first King of Egypt) was an appellative of an Arkite.

Was this why he was so described to Herodotus?

I have brought three pieces of circumstantial evidence to prove Ham and Menes are one; it is the only evidence which *can* be produced. Is it satisfactory, or is the verdict 'Not proven?'

In Bunsen's fifth volume he mentions a papyrus, 'the oldest book of the world,' in which the death of the great An (or *Am*) is recorded, and the succession of S-nefru or good S. As in hieroglyphics, the engraver never puts two similar consonants together, this may, and doubtless does, 'mean Sn-nefru, or, good Sn succeeded.' Is this Shem? The Chinese record, that Shun succeeded Yaou, or Shem followed Noah. S-n or S-m may mean the Sem of the LXX, our Shem, and the great An or Am his brother, our Biblical Ham, the Am-mon of the Greeks.

Are we quite right in thinking the dispersion took place in the time of Peleg? In Gen. x. 5, the birth of Peleg is recorded as well as in Gen. xi. 16; in Gen. x. 25 we have 'the name of one was Peleg; for in his days was the earth divided.' Does this imply a dispersion of the people, or some great catastrophe which divided or separated continents?

I am aware the suggestion is *new*. Does it necessarily follow it may not *be true*?

Was Peleg named 'division, separation, or partition,' from some event which happened about his birth or during his life?

Was Peleg's name, 'division,' given from something which happened at his birth, or some event which took place in his middle life, in which he took an active part; as, for instance, Scipio, who conquered Carthage, having the name of Africanus given to him?

We know nothing of Peleg except what is related in Gen. x. and xi., unless he was the progenitor or *leader* of the Pelasgi clan.

In his 'Malay Archipelago,' Wallace, in vol. i. chap i. page 7, says, 'In many of the islands the years of the great earthquakes form the chronological epochs of the native inhabitants, by the aid of which the ages of their children are remembered, and the dates of many important events are determined.'

Have we here any resemblance to Gen. x. 25?

There is such an amount of difference between the versions of the Old Testament, in the chronology of Gen. xi., that one is entirely confused. Gen. x. 25 says the earth was *divided* in Peleg's time. First, what does *divided* mean? Eusebius says that Noah, 330 years after the Deluge, divided the earth among his three sons; by the Hebrew text Peleg was born 101 and died 340 years after the Flood. Could this division have any connection with an event in his last decade?

By the LXX chronology, rejecting the second Cainan, Peleg was born forty-nine years after Noah's death. Can we therefore suppose Eusebius considered Peleg's name connected with the dispersion?

But let us go to the Hebrew. Perhaps, after all, I may be right when I suggest that the words in Gen. x. 10, 11, may have been misplaced; if they have been, Peleg was born 201 years after the Deluge, about which time some cosmic event may have occurred. In his 'Malay Archipelago' Wallace (see his chap. i.) seems decidedly of opinion there has been some great convulsion in the Indian Ocean, depressing and raising lands. The question of how many years ago this took

place, he does not discuss, *whilst I am fool enough to do so.*

But Peleg, born 201 after the Deluge, and living 239 years, would die 440 after, or 110 years after the date given by Eusebius; so that *both* events would happen during his life, *or time.*

In Gen. x. three times is the word used, which in the authorised version in each case is rendered 'divided,' viz., verses 5–25, 32; the same word is used in Gen. xxv. 23: 'Two nations shall be divided,' that is separated, or descended from thee. Let us always bear in mind the poverty of early language.

Divided, separated, descended, parted, spread, were at first one word.

Kalisch gives *spread* as the proper rendering in verses 5 and 32, and 'parted' in verse 25. Thus, we have the sons of Javan descended from Japhet, *spread* over certain localities, whilst the sons of Noah *spread* over the whole earth; but in Peleg's time (days) the earth *parted.*

CHAPTER IV.

EGYPTIAN COSAS.

Is Shem Cheops? I am quite prepared to have it denied. All who believe in the LXX, or think Usher's chronology infallible, will disagree with me, even supposing they allow the correction in Gen. xi. 10, 11.

Let us however for a moment consider how languages change; words in the English language, during the last 300 years subsequent to the invention of printing, have become entirely reversed, 'prevent,' for example, as generally understood. I do not intend to insinuate we have not the 'spirit' of Scripture in our version, but we must not stand upon our translation being literally exact.

I have a Bible of 1608, in which in Gen. i. the command is giving to man to be 'fruitful and multiply, not to 'replenish' but '*fill*' the earth. Here is a very important difference from the common version; to *replenish* implies, I imagine, a re-filling, and points to something which before had been filled, emptied, and filled again. We may *fill* an article which had been once full and emptied, but would anyone say he made a cask for the purpose of holding a liquid, and *then replenished* it? We have here a wrong translation; how it arose it may be quite impossible to say. The same

word in Gen xxi. 19 is translated 'filled,' though there, we know, the bottle had before been full of water.

Geologists, therefore, have some excuse in this wrong translation; when I first read geological works, I was very much 'troubled' with this word 'replenish' a world which to me appeared to have been empty at creation.

By the Bible version (Gen. xi. 27) there is no doubt that Abraham was born 292 years after the Flood, and Isaac 100 years subsequently. Esau and Jacob, it is generally supposed, were born sixty years later, or in 452 P.D. Esau married at the age of forty, or in 492 P.D., ten years before the death of Shem. Shem, again, is said to have lived 500 years after the birth of Arphaxad, who by Gen. xxi. 10, 11, is stated to have been born two years after the Flood. In Smith's 'Bible Dictionary' (article 'Shem'), it is stated, 'And when Shem died, Abraham was 148 years old, and Isaac had been nine years married.' By the authorised version, Shem lived 502 years after the Flood (Gen. xi. 10, 11), and as Abraham was born 292 years after that catastrophe, and died aged 175, or P.D. 476, Shem must have survived Abraham 35 years. By the LXX, Shem died long before Abraham was born.

I cannot see how the writer quoted before, in Smith's 'Bible Dictionary,' came to his conclusion. If he thought (from the wording of Gen. xi. 10) as Shem was 100 years old when the Flood came, that sum should be deducted from the 500, Abraham would survive him sixty-five years; I make him survive Shem the same.

Isaac, born P.D. 392, married when forty years old, or 432 P.D.; he was consequently seventy years married when Shem died, and his son eight years old. Who is right?

The same writer says, 'There is no chronological difficulty in that Hebrew tradition which brings Shem and Abraham into personal conference.'

This refers to Melchizedek, who is supposed to have been Shem. It is tradition, but the report *may* be true, and as Abraham is only reported to have met *two* persons, if the tradition is *true*, and does not refer to Melchizedek, it must point to Pharaoh.

It appears to me, there is more inferiority expressed in the way Abraham meets Pharaoh, than in his interview with Melchizedek; the latter, one of the faithful, comes of his own accord to offer hospitality to Abraham; he recognises a believing brother, and through Melchizedek pays tithes to the Almighty. Could Melchizedek have been Eber? One cannot but feel there *may* be truth in this tradition of the Hebrews, and my solution does not in any way involve an increase to Shem's age, but, as well as the Jewish tradition, tends to disprove the chronology of the LXX in Gen. xi.

That such an alteration as I have suggested may very easily have taken place, I do not suppose anyone will be bold enough to deny, when they reflect that we have no copy of the Book of Genesis which has not been already copied and re-copied very many times; and it is well known to critics that the Hebrew text which the LXX translated was not pointed, and that in many places it can be detected, the Hebrew was written in such a way as to cause the Greek translators to run two words into one, to make two words out of one, to add to a word the final or initial letter of another (see Smith's 'Bible Dictionary,' LXX).

One of my '*cosas*' is, whether the Gordian knot,

which in my boyish days I was informed was cut by Alexander the Great, was not a *chronological question* or dispute which he settled. We have no trustworthy history of the translation of the LXX, but it is pretty generally believed that *the king* began it, or caused it to be begun; also there can be no doubt but it was made at Alexandria. Nothing seems to me more natural than that Alexander, confused amongst Hebrew, Greek, Persian, Indian, and Egyptian chronology, should have deputed certain learned men to consider the question; in doing this they were of necessity obliged to examine the Hebrew record, and no doubt hence arose the translation of the Pentateuch, which is more pure and correct than the residue of the Septuagint Greek. Subsequent kings continued the work. In doing this they corrected somewhat the chronology (thinking, like many men now alive, and who have read the Scriptures ever since they read anything, the Bible to be in error), by the addition to the genealogy in Gen. xi.

But such a correction, we can see, was by no means necessary—I speak here, even supposing the Bible to be only common history. I began by showing Josephus placed Menes in or about B.C. 2350; he no doubt was better acquainted with the LXX than the Hebrew text, and yet he saw that Menes could not have lived farther back than B.C. 2350. I brought his time down to B.C. 2381, and now beg to suggest that if Cheops be Shem, and Menes or Men be Ham, they must have been contemporary Pharaohs during the life of the elder brother. Should this be accorded, the reign of Menes must have begun in Egypt sixty-seven years before the visit of

Abraham in B.C. 2214, or in B.C. 2281,* when Zoan or Tanis was built, seven years after the building of Hebron in 2288. We may therefore infer that the dispersion took place some fifteen or twenty years before; this would place that event in between B.C. 2308 and B.C. 2303, or from forty-seven to forty-two years after the death of Noah, and from five to ten before the birth of Abraham at Ur of the Chaldees.

I have already remarked that the thirty-seventh king on the list of Eratosthenes is the first king of Manetho's twentieth dynasty; Eratosthenes thus cuts out all of the eighteenth and nineteenth dynasties except two kings, whose reigns add up to nineteen years; or in other words, he cuts out, say 470 years, but perhaps more, having previously reduced the list very much; he must have had some reason for this. Let us see how it will work: I have reduced the list of Eratosthenes 569 years, by striking out all before Aphoph, and making him contemporary with Menes during the latter's reign. I find the Exodus took place in the fifty-first year of the nineteenth dynasty, B.C. 1555. If we deduct from this date 153 years for the residue of that dynasty, we are in B.C. 1402, for the beginning of the twentieth, adding 982 years, the sum of the reigns of Eratosthenes' thirty-six kings, we arrive at B.C. 2384, against my 2281, exactly the difference between his deduction from Manetho, and mine from him. It is therefore perfectly plain, no matter what his reasons were for making this deduction of 470 years, that his object was to put Menes not further back than

* Under 'Egypt,' Lemprière says the sons of Ham came into Egypt B.C. 2188.

which in my boyish days I was informed was cut by Alexander the Great, was not a *chronological question* or dispute which he settled. We have no trustworthy history of the translation of the LXX, but it is pretty generally believed that *the king* began it, or caused it to be begun; also there can be no doubt but it was made at Alexandria. Nothing seems to me more natural than that Alexander, confused amongst Hebrew, Greek, Persian, Indian, and Egyptian chronology, should have deputed certain learned men to consider the question; in doing this they were of necessity obliged to examine the Hebrew record, and no doubt hence arose the translation of the Pentateuch, which is more pure and correct than the residue of the Septuagint Greek. Subsequent kings continued the work. In doing this they corrected somewhat the chronology (thinking, like many men now alive, and who have read the Scriptures ever since they read anything, the Bible to be in error), by the addition to the genealogy in Gen. xi.

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As, however, Eratosthenes would differ from me sixty-four years in the date of the Exodus, we will reduce his years by this amount, and have the date 2320 B.C. We shall then find the average of the six to be 2285 B.C. against my 2281 B.C. Yet Canon Trevor says Eratosthenes puts Menes in B.C. 2600, but gives no explanation for his reasons in thinking so. Eratosthenes in making this deduction no doubt intended to take out the 'Hyksôs' five dynasties, which he knew never had any existence; but we know he was in error in the way he worked, for there are very undeniable proofs of the existence of a great many of the kings of Manetho's eighteenth and nineteenth dynasties, though none of his thirteenth, fourteenth, fifteenth, sixteenth and seventeenth. It is thus perfectly evident that Eratosthenes was not acquainted with the monuments of Upper Egypt, or he would not have so acted.

Now, let us try and put ourselves as near as we can in the position of Eratosthenes. A list is laid before him by the king, of the rulers of Egypt; he is ordered to examine and report upon it; the years of the reigns of the kings in the list, Manetho says did not actually amount to more than 3,555, though the list appears to show much more. Out of Manetho's six first dynasties, which contain forty-nine kings, Eratosthenes appears to have struck out twenty-seven, either as repetitions or names unworthy of credit.

The twenty-two kings left by Eratosthenes reigned 676 years, or thirty and a half each; by the same rule, the twenty-seven extracted would have reigned 823. Eratosthenes appears, therefore, to have reduced the list of Manetho by this amount in the first six dynasties; if

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the Hebrews. Manetho gave them 511 years, Exod. xii. 430; but Eratosthenes, in allowing 470, and thus 'splitting the difference,' could not have found those words which we now have in the LXX, viz., '*And their forefathers in Canaan, and*, in the land of Egypt. Have we any copy of the LXX older than our copies of the Hebrew text? I am well aware there is a large number of very sincere believers, who think the chronology of the LXX must be right, as Archbishop Usher does not give sufficient time for the events which are narrated. These persons seem to forget that the Power which has so wonderfully kept the Bible text true and pure, notwithstanding all its copyings and recopyings, could and no doubt did preserve its full integrity in the language in which it was originally written. No critic would say for a moment that a Latin version of Homer was more trustworthy than the Greek. Some say there was a *settled* Government at Babel, in the fourth century P.D., by the LXX, and earlier by our Hebrew copies. I fear their ideas of a settled Government are very indefinite; surely they do not mean a Government under King, Lords, and Commons! What does a settled Government mean? I suppose anything, from that of the late King of Abyssinia, to whom envoys were sent, to that of the United States of America, elected purely by the people. The Government, whatever its nature, was entirely of a patriarchal, pastoral form, such as may be found in the present day under Arab Chiefs. As long as Noah lived, it no doubt kept under one head, but immediately collapsed at his death; his influence kept them under control, and in order, but on his death the evil spirit

began to work among them. During the three centuries and a half of his life, the population was probably a peaceable one, and not decimated by wars amongst themselves, though wars appear to have existed before the Deluge; and whether we calculate the increase of the people, at the rate of doubling in twenty years or more, or less frequently, it must have become a very large number. Into how many parties they broke up, of course, there are no means of calculating, but as all Ham's sons recorded in the Bible, with the exception of Canaan, appear to have entered Egypt and Arabia, or Ethiopia, as it was for a long time called, we may suppose they formed a large portion of the then world's population. Probably there was some mysterious influence which impelled them westward. In Gen. xi. the people are described as moving from the east, and thus they moved on, till, turned aside in Palestine by the Mediterranean, they found their way into Egypt, where they were stopped on the plateau of Gigeh, by the Nubian morass, above Semneh, which then existed to the south, and by the Libyan Deserts to the west. We find in 1 Chron. iv. a mention of the Vale of Gedor, 'where they of Ham dwelt of old and found rich pasture.' I fancy this is the Gedor in the south-west of Palestine, on the Brook Bezor not far from Gaza, and this probably was the last permanent resting-place they had before their entrance into Egypt; it is about half way between Hebron and Tanis, and no very great distance from the Wady Maghara; and then may have been engraved most of those hieroglyphics now found there, and which, without doubt, are records of the children of Ham during their wanderings.

I am one of those persons disposed implicitly to believe that there is profit for some one in every word of Scripture, or in other words, I believe there is nothing recorded in the Word of God, which may not be useful to some one; certainly it is not over much encumbered, still it is plain enough to a careful, patient, humble reader who will not be tempted to question it in a Manethoic spirit. Looking at chaps. x. and xi. of Genesis in this state of mind, I believe the scribe was inspired to write them, expressly to correct the doubting spirit which has now sprung up in the minds of men. We find mention in Gen. x. of the sons of Japhet, but those only of his grandsons, with whom the Hebrews were to come in collision: so with Ham's descendants; and again with those of Shem, the Joktanites, who settled in Arabia. Here let me remark the way in which the descendants of Noah are recorded in Gen. x., and ask if it does not demonstrate that the order observed in our translation of Hebrew names, when two or more are put consecutively, is wrong. Japhet is mentioned first; in verse 21 he is called Shem's 'elder' brother; then comes Ham. Bishop Newton says the Hebrew word used in Gen. ix. 24, which we translate 'younger,' is equivalent to '*minor*;' if so, we have Japhet elder, Ham younger, and Shem of course youngest. He comes last in the genealogy of Gen. x., and in his proper place if he is the youngest son. Why he and the Joktanites should be so distinctly mentioned as they here are, unless they and the Hebrews are to meet in after years, I cannot understand; and they did do so. If we could foresee events which in after centuries will cause descendants of our own, whose ancestors went to

North or South America, or Australia, to meet, we should probably be disposed to give each original emigrant a memorandum of the family, to enable him to trace the connection in after times.

But I will return to the Hyksôs, whom I may, in the eyes of some, have dismissed in too abrupt a manner, Boileau says, 'Qui ne sait pas se borner, ne sait jamais écrire.'

I will therefore try to follow this principle, and not go over all the authorities who have ever written on these mysterious shepherd kings, but will take only one, and certainly not the least learned, or the most ancient, viz., Professor Ewald of Göttingen.

Let us bear in mind that Manetho places the Hyksôs in his thirteenth to seventeenth dynasties inclusive. Professor Ewald in his 'History of Israel, to the Death of Moses' (p. 388), says, 'That the whole Hebrew movement from the north could only terminate in rich and beautiful Egypt may be inferred, as we have seen from the general mutual relations of the nations of those times.'

What authority he has for these mutual national relations, other than his own fertile imagination, I cannot understand. Certainly to my mind Palestine is a more beautiful country than Egypt; Abraham seemed to prefer it; and if it was not a richer country, I do not think the Almighty would have chosen it for his favoured people.

Again (p. 389), 'Now it is clear from the fragments of Manetho, that before the eighteenth dynasty, whose great power and well-established rule the monuments sufficiently attest, Egypt was the scene of prolonged contests with the races called by the stationary

Egyptians Shepherds (i.e. Nomads), and towards whom, as even Hebrew tradition bears witness, they cherished for centuries a deep aversion.' If by 'Hebrew tradition' he means our Bible, I beg to remark, such a construction cannot be put on the few words of Joseph to Pharaoh respecting his family: there is nothing whatever alluding to centuries of aversion in his words; if he has any other Hebrew tradition it is to be regretted he has not named it.

The word used in our Bible, 'abomination,' may not in the original have meant more than great dislike. Did not the ancient Greeks call even the civilised Egyptians, as well as the Persian mathematicians, by the common term of 'barbarians,' along with other nations? Again (pp. 390–1), 'But we may safely infer, in general terms, a long continuance of the supremacy of the Shepherd Kings in Egypt. Its chief points are as follows:—The shepherds, coming from the East, conquered the country by a sudden blow, burnt the cities, destroyed the temples, and in general treated the inhabitants with the greatest cruelty. The first king, Salatis, settled in Memphis, but selected Avaris as a strong place, to be defended by a permanent force of 240,000 men. He reigned nineteen years; Baoun forty-four years; Apachnos thirty-six years seven months; Assis forty-nine years two months.' He further describes how the Egyptians drove them out, and they went into Judea, and built Jerusalem.

Herodotus says nothing more of the Hyksôs than that the Egyptians hated shepherds, because they supposed the shepherd Philitis had urged Cheops to build the Great Pyramid. Josephus, as Ewald acknow-

ledges, says the Hyksôs story had its origin in the sojourn of the Hebrews in Egypt, and in the termination by the Exodus. Herodotus was told by the priests of the victories of Sesostris, but not of any over the Hyksôs; all the victories of Sesostris related to him happened in foreign lands. The six kings whose names and exact length of reign are so minutely given, are hardly to be found; there is a cartouche of King Pepe, Pepi, or Ape, who is supposed to be Phiops or Apoph; there is also a tomb of Assis Kaf, or Assis Kuf, but in a country where nothing decays, there are no other records of these so called Shepherd Kings, who maintained a 'long supremacy in Egypt.' Manetho places the Hyksôs after the twelfth dynasty; the only two names of these six kings which can be found are given by Manetho before the seventh dynasty; and as far as monuments can corroborate history, they establish the same fact. If these kings existed at the time Ewald says they did, it was when the Egyptians were quite capable of executing very highly finished ornamental works; but except the tomb of Assis Kaf or Kuf—perhaps Assis, son of Kuf, Kufu, or Suphis,—there is nothing of the kind to be found, neither any remains of destroyed temples, and of such remains the climate of Egypt is very tender; in fact, we have no temple, or temple remains, yet discovered, which date before the eighteenth dynasty. I believe the most ancient of all are the quarry records of work carried on in the twenty-second year of Aahmes, the first king of the eighteenth dynasty, the king 'who knew not Joseph,' for erecting a temple to Phtah; also the solitary obelisk, the single remnant of the great temple of the Sun at On.

Again (pp. 393–4), 'I have always recognised that

the Hyksôs must stand in some close relation to the Hebrews; understanding this word, however, not in its ordinary acceptation, but in the primitive sense in which, before explained, they first appear in the land of Jordan.' Our Bible says Abraham appeared alone. 'Coming, according to Manetho, from the East,* the Hyksôs established, on the north-east boundary of Egypt, a camp on which they could easily fall back at any moment. They are even called, according to one reading, *Phœnician* Shepherds, which, considering the Greeks called all the inhabitants of Canaan indiscriminately Phœnicians, or even Palestinians, is almost identical with Hebrew shepherds.'

This may be a fair inference, but I cannot see it; there were many Jews, when Manetho wrote, in Egypt, and he must have known something of the Hebrew nation. I cannot suppose he was at all likely to make this supposed confusion. 'The description of wandering and encamping tribes agrees exactly with the reminiscences preserved in the Old Testament, of the primitive Hebrew race gradually pushing forward from the north-east towards the south, and Egypt.' We do not generally describe a people living in moveable camps, and wandering from place to place, as one who form a permanent camp for centuries, and keep an army in it. As for Avaris, or Abaris, this reputed camp, where 240,000 soldiers were located for centuries, to the present date no trace of it has been found. But our Old Testament does not allude to the movements of the Hebrews in the way he states: it is a record of a single family up to the time of Jacob's entry into

* The Jordan is not East of Egypt.

Egypt; and how can this be made into such an immense army? Abraham mustered 318 trained servants born in his service, for the field; Jacob's party is recorded as sixty-six, including 'little ones,' and no doubt he also had his servants. Again (p. 395), 'Moreover, the idea that the migration of the two patriarchs was occasioned by the same cause as the later national migration to the same country, viz., a famine in Canaan, is very vague and general.'

Does he include Isaac in the two patriarchs? I beg to remind him, Isaac never migrated into Egypt. But is it extraordinary for famine, or seasons of drought, to occur? Abraham, Isaac, and Jacob were possessed of immense flocks, and would suffer much from drought. There must have been a lapse of at least eighty-five years between the famine when Abraham went into Egypt and the one mentioned in Isaac's life; and, supposing Jacob was born soon after the last, 130 before the Josephian famine. Surely we cannot say, from what we know ourselves, there is anything very wonderful in these events.

And (p. 395), 'On the other hand, it would be an equal violation of history to understand Abraham and his family alone by this Hyksôs people. It is only in the extant Israelitish legend (i.e. our Bible) that he appears as the great father of all the Hebrews far and wide around Canaan.' (The Bible says, Eber was the father of all the Hebrews, not Abraham.) What does this mean? If Abraham had anything to do with the Hyksôs, his descendants from Ishmael, and the sons of Keturah, could never have grown in one hundred years to 240,000 men, even if we had a *legend* of any second

visit made by him to Egypt; neither did Isaac ever go: he therefore could have nothing to do with the Hyksôs. Isaac was expressly forbidden to go into Egypt; we can therefore see the prophecy of 400 years' residence in a strange land began after his life.* And (p. 396), 'Abraham being only one among many leaders of these tribes.' The previous page he is 'the great father of all the Hebrews.' What, then, of the order to leave 'his kindred and his father's house?' Again (p. 397): 'We must therefore suppose that a great movement of nations, from the north to Egypt, took place in the earliest times, and carried the inhabitants of Northern Arabia in multitudes thither; a movement we can describe by no other name than *Hebrew*, and in which Abraham bore a part, though only as a small prince.' This is certainly not in accord with Scripture or geography; the course from the north to Egypt would be across Canaan, leaving Arabia entirely alone. As the Hamites went, first they founded Hebron, and then, entering Egypt, built Zoan. Northern Arabia is almost due east from Northern or Lower Egypt.

In a note to p. 398 he says, 'The words Gen. xii. 6, and Gen. xiii. 7, cannot possibly mean to say that when Abraham entered the land it had never been unpeopled since the Deluge.† It is hard to know *what* he means; our Bible says the Canaanites were *then* in the land; it was already settled by the descendants of Canaan, who were to be expelled by the children of Israel; there is no allusion to its having been unpeopled, which would

* The Professor forgets the Joktanites, who settled in Arabia, were children of Eber.

† Is there *any* record of any land having been *unpeopled* since the Deluge, i.e. quite depopulated?

imply it had been occupied by some people before Canaan settled it.

We find, p. 398, 'Abraham and Joseph in the Pentateuch came to the courts of apparently native Egyptian kings; yet this semblance does not make it impossible that the sovereigns reigning in the north of Egypt may have been Hyksôs.'

Of course we may suppose anything. But if Abraham was a Hyksôs prince, and Pharaoh was a Hyksôs king, there would be some mark of recognition shown: the same holds with Joseph. Herodotus says the Egyptians hated shepherds, because they fancied the shepherd Philitis had induced Cheops to build the Great Pyramid, but says nothing of Hyksôs wars, and their expulsion. The priests would have been very glad to have related any such victories of their kings. On p. 399: 'For the reason just alleged, some blending of the native Egyptian with the more Hebrew Hyksôs civilisation was unavoidable, but beyond that, these tribes evidently retained marked peculiarities in language, customs, and religion, distinguishing them from the Egyptians, and bringing them nearer to the people of Israel, who were in many respects their followers. In fact, the peculiar culture of this evidently very enlightened youthful race, perfected in the seat of the old Egyptian philosophy and art, may be traced far into succeeding centuries; though we have to regret that so little definite knowledge of them can now be recovered.'

He gives no reason or ground for these views and and assertions, no reference to prove there exist any monuments, to show that this 'enlightened youthful

race was perfected in Egyptian art.' All Egyptologists agree that it is extraordinary that this Hyksôs nation could have ruled for centuries in Egypt and left no mark of any kind. I believe the only allusion to them yet found on the monuments is that on the base of the statue of the Vocal Memnon, where he is described as 'the smiter of the Hyksôs.' The time here agrees with Manetho, but is evidently different from that of Professor Ewald. In a note to this page he says, 'To this must now be added the important excavations on the ancient site of Tanis, just accomplished under Marriette: the peculiar character of the remains discovered there, point to the Hyksôs, and afford additional proof of the fact that under them Egyptian art assumed a new form, and was loved by them.'

This note is to a remark he makes that *Tanis* is a Semitic word and means '*wandering*.' If this is the case, an das Tanis or Zoan was without doubt the city first built in Egypt, may it not have had the name given to it, to mark the end of the *wandering* from the plains of Shinar? Driven west by some secret impulse, they at last find themselves stopped on the west by the Libyan Desert; on the south, by the marshes which then existed at Silsillis; they are forced to settle, and build themselves a city which they call Tanis. If Tanis is Semitic, it shows descendants of Shem were mixed with them. Osburn has suggested, that Menes should be called 'the Tanite,' not 'Thinite;' in the days of Manetho, no doubt Tanis had decayed, or his copyists may have corrected him.

Again (on p. 400): 'When later writers, on the other hand, speak of a powerful Assyrian empire existing at

the time of the Hyksôs, and menacing them, we may leave it doubtful whether the great northern Power was known by the name of Assyria. The four allied kings whom Abraham had to combat, and whose speedy overthrow gained him gratitude from the Canaanites, came from the north-east, and were doubtless bent on a plundering excursion into Egypt.' This I am very much disposed to doubt.

But who are the 'later writers?' does he mean writers subsequent to the date of the Bible? why does he not name them?

This empire could not have been a very formidable one, when the army was routed by Abraham with a force of under 1,200 men—I say *under* 1,200 advisedly. He had 318 of his own armed servants, and it is not in the least probable, Aner, Amre, and Eschol, each turned out a like number.

In the May number of 'Good Words' (1868), the Duke of Argyll, in writing on 'Primæval Man,' makes exactly the same mistake as the learned German professor; he says, 'The existence in the days of Abraham of such an organised government as that of Chedorlaomer, shows that in B.C. 2,000 there flourished in Elam, beyond Mesopotamia, a nation which *even now* would be ranked among "the great Powers."' I beg to say the Italics are mine. But fancy a man who has been a Cabinet minister in England, in the year in which the battle of Sadowa was fought, thus writing of a force of rabble, who were routed by a party of volunteers, collected on the spur of the moment, as his own ancestors a few centuries back would have collected their retainers under the 'Fiery Cross,' who could not,

as I have pointed out, have numbered more than 1,200 men. The kings in alliance with Chedorlaomer were heads of tribes, just as men are chiefs or kings, in the original word of Scotch clans.

The last extract I shall give from Ewald, relating to the Hyksôs, is from p. 400. 'Under the circumstances, it seems certainly at first sight less difficult to understand how the Israelites, a Hebrew people, could be transplanted to Egypt, especially if at the time of the migration, the Hyksôs were reigning there; there must have been something quite exceptional in the circumstances affecting that one nation, if it were only from the fact, they are known to have been able to remain long after the expulsion of the other Hyksôs.'*

Certainly most exceptional, that the Egyptians should rise and expel the Hyksôs, and yet allow a part to remain. So much for the remarks of a very learned man on these Hyksôs. Manetho puts them in the thirteenth to seventeenth dynasties, inclusive; Ewald puts them back, without any authority or explanation, into or before the sixth dynasty; how long they ruled in Egypt he does not pretend to say; but if Jacob came in during the twelfth dynasty, and they were expelled subsequently, they must have reigned not five, as Manetho says, but eleven dynasties at the least—six to seventeen inclusive. I do not suppose all those Egyptologists who believe the Hyksôs existed, will sneer at *Hebrew tradition* and *Israelitish legends* as the Professor does. That raids or inroads were made by the shepherd tribes of Canaan, I do not deny; we have a trace of one in 1 Chron. vii. 20–23, where

* We have seen Bunsen make the Hyksôs come in *after* the Hebrews.

the death of some of the sons of Ephraim is mentioned, caused by an inroad made by the men of Gath; it reads as if the men of Gath had been born in Egypt. Were they descendants of Capthor, who emigrated into Canaan? Those who wish to see the Professor's remarks at large on the Bible, must read his book. I will give one instance (p. 406). He says, 'Joseph may then, with the sanction of the King of Egypt, have adopted a measure identical with that of the modern military frontier, which proved the only efficient defence to the civilisation of Europe against the Turks—summoning Israel out of Canaan, and establishing them in Goshen as a frontier-guard of the kingdom, against any new attacks of the Hyksôs. This view is favoured by all the historical indications, and opposed by none. The land of Goshen may certainly, as is said in the extant stories, be a very suitable part of Egypt for a pastoral people; but it was evidently chosen for Israel as the frontier province towards the east, and an advanced post on the side of the Arabian Desert, whence the Hyksôs might easily renew their incursions. It has already been shown that the Israelites were very warlike and powerful; and so, when making their final Exodus from Egypt, they appear well equipped for war.' Surely here is a precious muddle. The only instance of the early warlike qualities of the Hebrews is the massacre of the Shechemites. If the Hebrews or Israelites were so very warlike and well armed at the Exodus, why did 600,000, able to bear arms, fear Pharaoh's army? They obtained arms from the drowned Egyptians; the Amalekites gave them a hard fight, and the bodies of armed men sent out by Joshua are but small in pro-

portion to 600,000 able to bear arms. In Numbers xxxi., 12,000 only are sent against the Midianites. Then, a short time ago, Joseph came to a Hyksôs king; now he suggests to the king to send for his father, aged 130, his eleven brothers, their sons, and grandsons—sixty-six in all—to defend an empire which had been able to expel an army of 240,000, who had oppressed the nation for centuries. Again we are told the Hyksôs and Israelites were both Hebrews; that when the Hyksôs were driven out of Egypt the Israelites were allowed to remain. How, if the Israelites were in Egypt when the Hyksôs were driven out, Joseph could call them in to protect the land, the learned Professor does not explain.

As regards the 'land of Goshen,' I believe it is Egypt Proper, and not a district in it. If any one will read Gen. chap. xlviii., and in doing so substitute Goshen for Egypt, and *vice versâ*, he will find the sense to be exactly the same. Pharaoh tells Joseph 'the whole land of Goshen (Egypt) is before him; you know it well; make your own selection; choose the best of the land for your father and his family to reside in;' and he placed them in the land of Rameses, which was a district *nome* or county, in which afterwards the treasure city, granary, or seaport of the same name was built, and which some have thought was towards Alexandria. Egypt in Scripture is often spoken of 'as the land of the river.' Sir John Mandeville, in his 'Travels in Egypt,' speaks of 'that great river *Gyson*, sometimes yclept the Nile.' In the country whence the descendants of Noah dispersed from, we find a river Gozan; we can trace the same

name in the Indian name of the Ganges, viz., Gunga. Perhaps the name in its original means 'a river subject to an annual overflow.' From the district in which Jacob and his family were placed, it is possible these men of Gath, who slew the sons of Ephraim (or their ancestors), had been expelled to make room for the Hebrews; for our Bible reads as if these Gathites had been born Egyptians, or originally descended from them.

What are the historical indications he alludes to, he gives us no clue whatever. How true are Canon Trevor's remarks, (p. 97): 'To modern rationalism, idolatry seems a safer guide than the inspiration of the Holy Ghost. The wild legends of a heathen priest are preferred to the sober narrative of Moses; not because the latter was less informed, or less trustworthy, but because he professed to have seen God, and to have received a law at his mouth.'

The reverend gentleman might have put it stronger. Moses' history is clear, consistent, connected, and simple; of Manetho's legends we have nothing but a few shreds, handed down to us by authors who, in quoting them, do so to deny their truth; and yet Bunsen prefers to trust to these shreds, and makes the sojourn of the Israelites 1,400 years, whilst Lepsius makes it not more than ninety; and Ewald, to defend the Hyksôs legend, is reduced to suggest that Joseph should call his father, of 130 years old, his sons, grandchildren, and great-grandchildren, a *posse comitatis* of no more than sixty-six males of all ages, to defend the great empire of Egypt from 240,000 'men in buckram.'

That the old Egyptians did sometimes weave Scrip-

ture facts into their fables, I think is proved by the following, which I find in Smith's 'Bible Dictionary,' under the article Chronology: 'There is an Egyptian hieratic papyrus in the Bibliothèque at Paris, bearing a moral discourse by one Ptah-Hotp, apparently eldest son of Assa (circ. B.C. 1901–1860), the fifth king of the fifteenth dynasty, which was of shepherds. At the conclusion, Ptah-Hotp thus speaks of him,* "I have become an elder on the earth, I have traversed a hundred and ten years of life, by the gifts of the king, and the approval of the elders, fulfilling my duty towards the king in the place of favour."' (Fac-simile d'un papyrus égyptien, par E. Prisse d'Avenues, pl. xix. liv. 7 et 8). Certainly this appears to correspond very much with Joseph. Hotp is almost Hosep; the other name is the prefix of the idol Ptah; the exact age Joseph is said to have died at, his life prolonged by favour of the king, or in other words, 'a king's favourite during a long life,' and the year the writer of the article gives to the time, does not vary much from me. If Jacob came into Egypt in 1985–7 and Joseph was then forty, he died in 1915.† If the 'Arabian Nights' Entertainments' were written in Egypt, have we not in Sindbad the sailor a very clear proof that the Egyptians had the power to weave out of a few facts a very long and complicated tale? Manetho knew that the Hebrew Scriptures existed, and contained an account of the Hebrews in Egypt; he thereupon put forth his own version, and thought it would pass muster. I suppose no one will doubt he

* Probably 'himself.' See Bunsen, vol. iv. p. 668.

† There can be no question but what this refers to Joseph. Ptha Hotep, eldest son of Assa is a mistake: it should be Ptha Hotep, *whose* eldest son was *Manassah*. Probably the error is in the papyrus.

knew of the Hebrew Scriptures, when he and the LXX were at work at their labours at the same time, and probably both in Alexandria.

Whether Manetho made out wilfully, for the purpose of deceiving Ptolemy, a false list of kings, or whether he was led into error by finding names of princes, and supposing them kings, and also found the same name written in various ways, and was not aware of the circumstance, it is impossible to say; I will therefore give him the benefit of the doubt. Eratosthenes does not appear to have been able to clear up these two points, though he certainly struck out of the list a very large number of Manetho's kings. I should by the list correct Eratosthenes in striking out the second Athothis and second Saophis, for the simple reason, that in those very ancient days fathers did not give their sons their own name; we must come down a long way in history before this is found the custom.

As regards a name appearing under various descriptions, I think the Nepercheres of Manetho, who, Mr. Birch (see Vyse's 'Pyramids of Gizeh,' vol. iii. p. 30) says, appears to correspond with a name Nofre-ke-ra, found in the Pyramids, is no less than Men-che-ra under another form. Menchera appears to me to be Prince Che, or Ze, son of Men or Menes; Nofre-ke or Che-ra, is good Prince Che or Ze. In the same way it may be said, Num Suphis is the same as Suphis, or Suphis son of Num or Men, and I think the Ansyphis of Eratosthenes, which I have supposed the same as [illegible]huris of Wadey Maghara, is An or Am Suphis; that [illegible]uphis son of An or Am, the *n* and *m* in hieroglyphics being interchangeable. Manetho also has one

Baiechous, whom Bunsen makes correspond with Chechous; he is said to have introduced the worship of the Bull Apis. Is not this Suphis, or Chus, or Chous under another form? If so, here in these two cases we have six royal names made out of two.

Let me add here, some remarks from a work on 'Scripture Lands,' published by a clergyman of the Church of England, after having visited them. 'These cities' (Memphis, On, and others), 'had been improved under the dominant race,'—(in a note he says, 'It is here assumed that the fifteenth, sixteenth, and seventeenth dynasties of the Hyksôs, or Arab kings, were occupying Lower Egypt from a period *earlier than Abraham's entrance into Canaan*, unto the rise of "the new" not "another"' (king who knew not Joseph),—'by more than two centuries of progress, since the days of Abraham, though many of the great works by which the country was distinguished had already been finished in his time. If during his *visit* he (Joseph) went towards Memphis, he saw the great dyke which Menes had constructed, and the wonderful cemeteries, with their mighty tombs, the Pyramids lying between him and the yellow range of the Libyan Mountains, on the west. On the smooth coating which then covered the outside of the Great Pyramid, he read the inscription, which told at how great an expenditure of wealth and life it had been raised, for the selfish exaltation of the builders.'

This is what Herodotus tells us the priests told him; but I think it may be one of those things which he left his hearers to believe or not: it is by no means certain the priests interpreted the inscription truly. 'Already

he found everything in Egypt on a more massive, solid, and colossal scale than he had witnessed even in the great cities of Chaldea (?) And now, accordingly, Joseph saw temples, porticoes, and obelisks towering aloft over all the cities of the Delta, in spaces which he knew were vacant when his great ancestor was there. How strange, in comparison with the familiar sights of his father's encampment, and the neighbouring towns, were the priests and officers of state, the royal chariots and outriders, and attendants; the mysterious inscriptions which he saw everywhere prominent above the great edifices of the city!'—Joseph being a *boy* when he left Padan Aram. And this is his description of the Exodus: 'And this will explain the spectacle which now, after our long stay in the Egyptian territory, we can realise with some distinctness, as we behold the sudden gathering of the people from all places of the thickly-peopled country, to the place of one of their encampments on the border of the desert, in their boats on the canals, and in hastily formed caravans, along the roads, some on camels and asses, others, the wealthier classes, in their chariots and palanquins. We see them crowding towards the place of rendezvous near the Egyptian sea, whole villages, and large quarters of the cities, being utterly deserted, as the gathering company made its way to one of the open spaces amidst the hills which close in the northern Gulf.' This does not exactly accord with the account given in Exodus, of the people going on 'foot,' with their dough wrapped up in their clothes, slung over their shoulders. Perhaps there are some people who will prefer the reverend gentleman's version, which

seems to me more to represent the annual London Exodus on a Derby Day than the one described in Scripture.

We can thus see how a German Professor, an English divine, and an Egyptian priest, transform Biblical narrative; and most people will, I think, come to the conclusion that the only real foundation for the Hyksôs rule in Egypt was, as Josephus says, Joseph's administration, and the sojourn of the children of Israel. When we remember Josephus wrote not more than 350 years after Manetho, he is more likely to be nearer the mark than those who write over 2,100 years subsequent.

I have already remarked, that I believe the only allusions to the Hyksôs on the monuments, is the inscription on the base of the statue of the vocal Memnon, where he is described as the 'Smiter of the Hyksôs,' and which I infer points him out as one of the persecuting kings. I have also pointed out that the tablets, both of Abydos and Karnak, however they may appear to differ in the names of kings, both agree in not allowing any room for the insertion of a dynasty which should reign upwards of five hundred years. Again, the same story is told by the records found in the quarries at Massara, where we find the first king of the eighteenth dynasty of Manetho, who Africanus says was also the last of the twelfth, and who appears to be so by the tablets of Abydos and Karnak, recording the fact, that the quarries were opened in the last year of his predecessor, and not in the time of a man who reigned 533 years before: those ancient Pharaohs did not honour their predecessors to such an extent as that.

Thus we have three stone records, more ancient than Manetho, to set against him, and further, the pictures on the monuments corroborate the Bible, and prove Josephus to have been right when he said the Hyksôs emanated from the Hebrew sojourn.

Professor Smyth (vol. iii. p. 386) says, speaking of Egypt under the Old Empire, or before the Hyksôs' time, 'Many estates—for sometimes ten or fifteen are expressly mentioned in the hieroglyphics—each with a name, and usually a notice describing by or under which king or prince the land had been reclaimed from the desert. This is an important element in the history of the times; indicating that Egypt was then a new country, with its kings, nobles, peasants, and all its inhabitants strenuously engaged in rendering the land amenable to cultivation, and suitable to raising food for man.'

There is much to interest the reader in the work of the learned Professor, which I must not attempt to extract; but he shows that even in the earliest time, long before the time of Manetho, there was a wonderful disposition to exaggerate the quantities of animals slain for a feast, the ancient 'hecatombs;' children so small compared with their parents, as in after times we find Rameses and his son depicted in his wars, all show the natural mind of the Egyptian, the tendency to magnify the king, the descendant of the Sun, Phi, the Ra-Sun, being our Pharaoh. But in this extract we find 'Princes' spoken of; 'the Princes of Pharaoh' are mentioned in Abraham's visit, but not after.

In p. 400, under the New Empire: 'These authentic testimonies, without doubt, speak of an unusually

prosperous period for the twelfth dynasty, testifying to union, numbers, and wealth such as had never before been seen.' Does not this seem the natural result rather of Joseph's great corn trade, than of war? He goes on: 'And the occurrence of which is looked on, by the author of the "Monumental History of Egypt," (W. Osburn) as the legitimate and to be expected result of the conclusion of the long series of Mencherian wars.'

The engineering works, which he alludes to on p. 401, I have already given to Joseph, whose advent I put in the early half of the so-called twelfth dynasty.

Again, on pp. 402–3, 'We can see the gradual absorption of all into one ruler: the princes disappear. The actors therein are still the same people, in their leading characteristic, or the literal descendants of the fourth dynasty.' It is curious, his leaping over all, from the fourth to the twelfth dynasty! Not but what I am very much disposed to do away with all the dynasties. 'But there sits the great man, still in colossal grandeur and unbending severity, overlooking the busy hive, every one of whose human bees is working for his benefit. Very great lords were still the many chiefs who ruled over the people under the king; one of them records his estates and privileges: first, the range of the eastern desert (should not this be western?) and its oasis, for his antelope hunting' &c., p. 404. 'This chief is described as holding honourable offices both in church and state; being first, the custos of the divine stable of the sacred bull; second, the constable of the palace of the king Amenes; and third, steward of the land tax for the support of the schools of the sons of the kings of Lower Egypt.' Does not all this correspond with the

narrative of Genesis, when by Joseph's system the king became lord of all except the priests' lands?

Page 405: 'In these tombs of the twelfth dynasty, too, the military element begins to appear, and in vaults below them, not yet discovered, are deposited the mummies—so the hieroglyphics tell us—of soldiers fallen in the wars of Sesostris against the black Cushites of Nubia.' Now, if the victory over the negroes is recorded, would not the victories, if any, over the Hyksôs have been also? 'At the same time, other personages appear on the scene, sometimes singly, sometimes in groups; men of aquiline features, brighter colour than, and different dress from, the Egyptians, immigrants from Arabia and Palestine.' Doubtless they were traders as well, if not more probably, as immigrants, Ishmaelites, by whose hands Joseph was sold into Egypt.

As regards the Hyksôs, he says, p. 406: 'And so the seat of Mencherian religionists went on until the fatal day arrived, and in a moment King Amenemes "the Third," (who must have been Joseph's third Pharaoh), the Amenes Timeus of Greek historical legend, was driven forth from his kingdom, which disappeared like chaff before the sudden irruption of the terrible Hyksôs. So at least say the Greek accounts; and they may not be without a foundation; though it will be lamentably deep, and far to find, by reason of its resting on tales derived, without critical analysis, from one-sided partial history recorded in state temples. A terrible dislocation occurred, no doubt, about that time, in the Egyptian annals, for from the thirteenth to the seventeenth dynasty inclusive there are few if any kings'

names recorded by the annalists; there is scarcely a contemporary monument to be found; and this period is said to have lasted two thousand years by some, and a thousand years by other hierologist authors.'

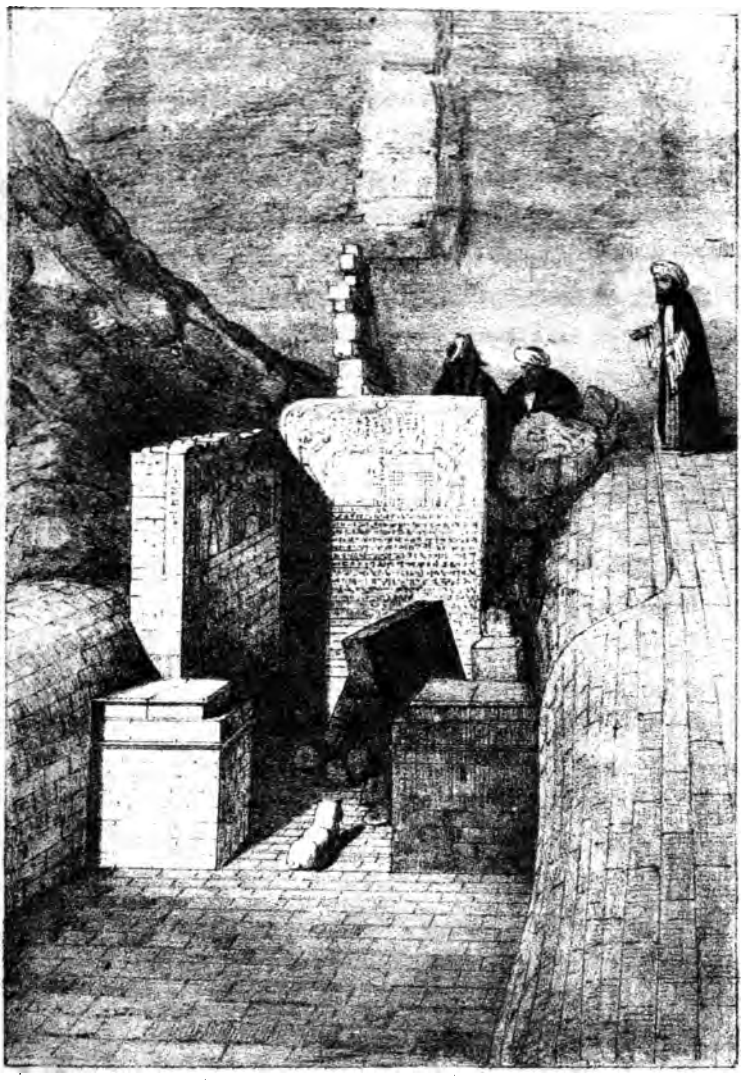
It seems to me the worthy Professor doubts the existence of the Hyksôs as much as I do. Page 407: 'But here steps in Osburn, and he shows that the whole interval between the twelfth and eighteenth dynasties did not exceed some two hundred years; and that the thread of Egyptian public life was never broken, or the current history brought to a stand, during that time.' Having arrived at this conclusion, I wonder Osburn did not go one step farther, and land on my platform of 'no Hyksôs.' How could a country be conquered, and held by the conquerors, two hundred years, and cause no interruption in public life or history?

Again, (p. 408): 'But was there no invasion, do our readers ask, by the historical shepherd kings? Mr. Osburn replies, in utter antagonism to some ancient and hitherto credited traditions, Hyksôs as a monarchy, acting for and by themselves, there were none; but Hyksôs as shepherd tribes, rangers of the desert, mountaineers from various regions, entering Egypt by the Isthmus of Suez, attaching themselves to, and sometimes considerably acting upon, the government there for the time being of those Hyksôs, there were many.'

Osburn, who had before said the Hyksôs *did* rule two hundred years, is here made to say they never acted as a monarchy by themselves. I cannot but feel quite certain that an astute observer and careful critic like

Mr. Osburn would have unravelled clearly this Hyksôs mystery, if his chronology had not been defective; in fact, he had got the sojourn of the Hebrews two hundred and sixty years too low down.

As for the defaced tombs, Osburn describes and thinks they were Hyksôs records defaced. He may be right; but this may be easily accounted for in other ways. They might have been defaced by a faction who had obtained the supremacy, in order to record their own praises, and then lost power; or they may have been defaced by a king, solely to enable him to have space to record his own deeds, as Layard found had been done in some cases with the slabs he excavated, finding them engraved on both sides.



VIEW OF THE TEMPLE BETWEEN THE FORE LEGS OF THE SPHINX.

CHAPTER V.

THE SPHINX AND PYRAMIDS.

No one has ever put pen to paper on the subject of Egypt, who has not alluded to the Sphinx as well as the Pyramids, and given his opinion on the latter, if not upon the former.

Professor Smyth, in vol. iii. p. 105, says, 'For there is no one who has written yet on the Great Pyramid, who has not blundered at some point or other.' And I have no doubt this remark will hold good for future times, and would be perfectly applicable to remarks on the Sphinx, had writers been as prone to write on this mysterious object as on the Pyramids.

One point I believe will be universally admitted, that the Sphinx was an idol; but whether it was built before, during the Pyramid ages, or long subsequent thereto, even as late as the time of Rameses the Great, or say, B.C. 1550–1530, there is no agreement, whilst all Egyptologists admit that the three Pyramids of Gizeh were built during Manetho's so-called fourth dynasty.

The accompanying plate, taken from Vyse, vol. iii., shows the appearance of the Sphinx at the time of Caviglia's excavations in 1818. It proves distinctly it was an idol, and without doubt was intended to be a per-

sonification of the Sun, from whom the ancients, tracing their belief or descent from the plains of Shinar, supposed everything originated. Bryant, in vol. iii. p. 163, says, that, *Helios*, or the Egyptian *Ra* '*the Sun*,' was *mundi mens*, in other words, the life or spirit of the world.

In Vyse, vol. iii. p. 114, there are the following remarks by Mr. Birch, on the large tablet: 'This tablet represents an act of adoration to the Sphinx, by Thothmes IV. or V.* The upper part is the following declaration of the Sphinx, "We decree that the Sun, the establisher of the world, shall be crowned on the throne of Seb; that Thothmes, the crown of crowns, shall be adorned with the glory of Atum." In another compartment the same monarch pours a libation to the Sphinx, which is here styled Ra or Hor, in the solar mountain, and is said "to grant power and victory to the lord of the world; to Thothmes, the crown of crowns." And also the following address of the Sphinx to the King: "I am thy father, the god in the solar mountain, Tor and Atum." It is, however, to be remarked that it is proved by this tablet, which seems to have been executed in the first year of Thothmes, that the construction of the image had then been achieved, which, from its enormous size, could scarcely have been effected in one year.'

Mr. Birch's remarks are long, and extend over several pages. At p. 116 he says, 'The Sphinx at Gizeh, therefore, probably represented, under the character of the Sun, the monarch by whose orders it was constructed, and it was afterwards worshipped in consequence of the superstitious observances which gave rise to the deification of departed kings.'

* Thothmes IV. of Lepsius, I suppose, was our Moses.

Professor Smyth, vol. iii. p. 326, says of the Sphinx, 'The massive build of the jaws bespeak not only a man, but a very powerful man; while the lamentable protrusion of the lower part of the face, combined with the low forehead and large as well as badly placed ear, show a decidedly evil and animal-minded disposition, to which the huge wig adds no idea of fine æsthetical perceptions.'

Can it represent Ham? We know no more of him than is told in Gen. ix.; but no doubt it is the likeness of one of the earliest of the Egyptian kings, and all the statues in Egypt are without doubt personal likenesses.

Mr. Birch says, 'According to Pliny the Sphinx at Gizeh was the tomb of Amasis, the first king of the eighteenth dynasty.' This is my king 'who knew not Joseph,' and would therefore show the Sphinx was no doubt excavated before Joseph's time, as the first record we have of Amasis is of his erecting temples to Ptha, at Thebes in his twenty-second year, three years before he died—not at Memphis.

An Egyptian monarch, like other kings, would prefer to erect temples near their courts; in this record of Amasis we see one effect of the operations of Joseph had been to move the court and population from the vicinity of On and Memphis to Thebes. This has often been supposed to have been caused by wars in the South; but of these we find no records. At any rate, it is very conclusive the Sphinx must have been cut out or built before Joseph's time. How long, is the question?

The conduct of Joseph's first Pharaoh is that of a man not entirely dead to the feeling of true religion; we may therefore infer that he was not very far steeped in idolatry.

We find On, or Heliopolis, called in the Bible (Jeremiah xliii. 13), Bethshemesh, or, 'the abode of the sun:' this exactly agrees with the Greek word Heliopolis, or *city of the Sun*; we find it also described in the hieroglyphics as An or Am (see Smith's 'Bible Dictionary,' article On). The writer says, 'The chief worship at Heliopolis was the sun, under the form Ra, the Sun simply; whence the sacred name of the place, Ha-Ra, "the abode of the sun," and Atum, the setting sun, or the sun of the nether world.'

Probably when Joseph came into Egypt the king had left Memphis, and was residing at On, as the great temple of the sun was begun by Osirtasen, the first of that name, who may have been Joseph's first Pharaoh. We can thus, by the inscriptions revealed by Caviglia, trace out distinctly a connection between Heliopolis and the Sphinx; and from the allusion by Jeremiah, we know that the Sphinx must have been uncovered in the time of that prophet, whilst On was no doubt deserted.

Was this the idolatry Cheops, Pheops, Sheops or Shem, was irate against, as the priests informed Herodotus—the worship or deification of a man?

Caviglia found an altar, now in the British Museum, between the forepaws of the Sphinx, bearing marks of burning, and so placed that the smoke of the sacrifice or incense would rise to the nostrils, reminding one of the words in Gen viii., where the Lord is described as 'smelling a sweet savour' from Noah's sacrifice.

I think, then, we shall not be far wrong if we conclude this to have been the idolatry which Shem or Cheops opposed, introduced perhaps after Ham's death, in extension of a practice possibly begun in Shinar. Joshua

tells us Abraham's ancestors worshipped idols; but we can see by the conduct of Joseph's first Pharaoh, that Shem's or Cheops' opposition had not quite died out.

The age of the Sphinx can, however, now be considered as pretty well settled; for in Bunsen, vol. v., I find, at p. 721, the translation of a tablet of the time of King Cheops, of which he gives the following version: 'The living Horus, the Conductor, the King Khufu, the living, he designed the temple of Isis, the Ruler of the Pyramid *near the house of the Sphinx*. . . . The temple of *the Sphinx of Harmachis*, on the south of the house of Isis, Ruler of the Pyramid.'

What does *Khufu the Conductor* mean? Is it possible it refers to a band of wanderers? Horus was a son of Osiris. Does 'living' mean surviving? Bryant (see *post*) says, Osiris *was Noah*.

We know not much of Shem, or Cheops, but his character, handed down to us by his father, is very different to that of Ham's: 'Blessed be the Lord God of Shem,' shows he had even then made his selection, and no doubt, like his father, he walked in the same path all his life, notwithstanding his pretended conversion, as described by the priests of Egypt.

I think too, in building the Great Pyramid, Cheops or Shem had in view a religious symbol of the Lord's dealings with mankind, and that he was directly inspired to erect it, as well as to make it so permanent that nothing short of God's own power in an earthquake could destroy it. In his remarks, Professor Smyth seems to recognise inspiration; and whilst I am anxious to pay full honour and respect to the Professor's labours at the Great Pyramid, I cannot suppose the builder was

inspired to erect it as a great standard of measure and weight; if so, inspiration has made a sad failure, in that the secret has not been discovered until every nation under the sun has settled its own standards of weights and measures.

That a universal system of weights and measures would be a very great convenience, and perhaps blessing, there is no doubt, but it is as hopeless as a universal language. In the year 1850, nearly seventy years after the French republicans had decreed the new system of weights and measures, I heard a woman in Hâvre, the Liverpool of France, crying grapes for sale, not at 'Un franc le demi-kilogramme,' but in the old Bourbon language of 'Vingt sous la livre beaux raisans.' And further, in the United States of America, the greatest and most enlightened nation in all creation, as they love to style themselves, though the *almighty dollar*, which they so devoutly worship, is divided into *hundredths*, go into a shop in Boston, New York, or Philadelphia, ask the price of any article, and six times in ten you will be told the price in *shillings and pence*; not only so, but what passes for ninepence in one State, in the next is one shilling, the parts of each dollar being the same; so that a man, by placing all his money in one pocket and standing astride on the boundary line of the two States, and, like Jem Crow, *twisting about*, can apparently increase his capital thirty-three per cent.

There certainly is something very wonderful in all the numerous discoveries made during this century—the most peaceful century upon historical record—so directly in confirmation of the Bible, in a variety of ways never to have been expected; and if we should

find indications of a construction which symbolise in any way God's dealings with man in these three Pyramids, which have thus far only been considered monuments of man's pride and vanity, but which have never been satisfactorily explained, surely it will only be aiding the influence produced by the Holy Scriptures at that time when 'the fullness of time' is looked for, and there will be no failure, as in the weight and measure theory.

There are, however, some points I wish to refer to, before I explain my ideas, such as they are, upon this point.

As regards mausolea, whatever the second and third pyramids may have been, there can be no doubt that the Great Pyramid, though apparently intended for a mausoleum, was not so employed; and it is no less evident it was never finished internally or externally. The reason why I say it was not finished externally, is the fact that there is no apex stone.

As far as I can gather from Vyse's volumes, every pyramid (except the Great) which retains its form, retains *also* its apex stone or stones; they do not in any case end in an exact point, but in a platform a few feet square, which from below appears to be a point. Now, if the casing was shaken down by an earthquake, this would be the case, or in other words the apex stone would be left. Then why should the Great Pyramid have lost what Professor Smyth calls 'its chief corner-stone,' when others retain theirs? Again, if the casing was shaken down, the upper casing stones, like the stones in the main structure, being thinner than the lower courses, and coming down last, would be

broken into smaller pieces. This is exactly what Professor Smyth did find on examining into the débris of the casing stones: the deeper he dug, the larger the fragments. We know the casing was perfect when Pliny, say A.D. 70, visited the pyramid.

In his first volume, p. 173, Vyse mentions the visit to his tents of Lieutenant Campbell of the Indian Navy, who, he says, 'told me, that in the previous spring he went to the top of the second pyramid in company with a Mr. Faber; that he found the ascent very difficult, owing to the rubbish, the projection, and slippery surface of that part of the casing which yet remained. The joints of the casing were horizontal, and the projecting angles of the stones, which were not of a large size, had been finished down from above. The west side was the highest, and a large stone on the apex had been displaced, possibly by lightning, but more probably by human violence; the platform was about nine feet square.'

We know, from Lyell's work, already quoted, it was a generally received, but erroneous opinion, when Vyse wrote, that Egypt was not liable to earthquakes; many things are put down by him to human agency, which, had he been better informed, might not have been.

I believe this is the only account or record of an ascent of this pyramid. The account, given a year after the event, is not so clear as we could desire; but I gather from it the apex plateau was composed of more than one stone, one of which had either been displaced, or had never been correctly placed, and the *plateau* was nine feet square, with a rise to the west. Could there have been any religious signification, or

was it merely accident? We know that the Egyptian Elysium was supposed to be beyond the setting sun. If the stone *was* displaced by hand, why was it not thrown down? I am disposed to believe it never was accurately placed, or that it was moved by an earthquake. And though at one time it was supposed, as I have before stated, Egypt was free from earthquakes, Smyth felt one; he mentions another in 1856, and as I am writing this in 1868, *two* are mentioned in the columns of the London *Times*. Strabo also says some of the colossal statues in Upper Egypt had been overturned by earthquakes.

As respects the interior, it is evident that the sarcophagus was never finished, nor was the Queen's Chamber, as the floor was not laid, neither was the lower apartment fully excavated. Perhaps there may be something symbolical in these facts.

Again, it appears to me, even if the whole of the north face was cased, the entrance passage was open, being as it were *a great eye*. It is true Strabo says, lib. xvii. p. 808, admission was to be obtained by moving a stone; this, if true, as well as his remark that the entrance to the chamber was by a *winding* passage, proves that he was acquainted with the well, and shows that the entrance passage was not then closed—*a great eye*, to watch that particular star for whose return it was levelled, looking out like a watchman in the night; for I suppose there is no one who will deny there was an astronomical design in the construction of this passage, and we well know religion and astronomy have often been connected.

If there was any feeling of religion or superstition in

the erection of the Great Pyramid, the builders would do all they could to make it not only perfect, but permanent; to the first Professor Smyth testifies most fully, also Colonel Vyse. His work * is now so rarely to be met with, that I hope I may be pardoned for quoting from it so freely as I do. Everyone who has read it must honour him for what he did in the cause of science, for it could not have been mere curiosity; and England (of which country I am not a native) may well be proud of such sons. In vol. i. p. 163, he says, 'I had not any idea the mass of the pyramid was composed of solid masonry. Indeed, after having ascertained the fact almost beyond the possibility of a doubt, it was difficult to believe it, or to comprehend an adequate motive for the construction of these magnificent buildings merely as sepulchral monuments over a tomb, unless it was the all-powerful influence of *superstitious* feelings' (italics mine).

And to show the desire of permanence, at p. 166: 'The stones were very large, and the half of *each of them* keyed in under the upper layer, besides which, many of them were in slanting directions, although in horizontal courses; it became therefore necessary to break almost every block before it could be removed.'

These last remarks are made with reference to his attempt to force an entrance into the Great Pyramid on the south side, but the first include all the pyramids in which Vyse tried to excavate.

Vyse says Mr. Perring found the mortar of the exterior courses (Great Pyramid) made almost entirely of lime; that as he advanced to the centre, it became

* Vyse's.

gradually to have the appearance of having been liquid, or probably something not very unlike modern concrete.

With regard to the entrance of the Great Pyramid having been closed or not, I think any one who looks at Vyse's plate of the entrance, will come to the conclusion that it is in a recess, or embrasure; and there are at least *two* broad stones or steps in the floor outside, on which observers might stand and communicate with those within. It must be roomy; for Professor Smyth says it is a favourite spot for tourists to lunch in; and on his first entrance into the pyramid he encountered three travellers and their dragoman at this work on these very stones. As regards the arched double roof of the entrance passage, I differ from the gallant Colonel, as I believe it was constructed to relieve the entrance and ascending passages of the superincumbent weight, and if we could see, I feel sure we should find it continued nearly if not quite to the Grand Gallery. His words, vol. i. p. 236, are, 'Others have conceived that a succession of these stones was placed over the passage in order to sustain the weight of the structure; but upon examination, square masonry is found immediately behind them; and it may also be remarked that, owing to the form of the pyramid, the upper end of the passage, near the exterior, has no great weight to support.'

True, but the weight increases very rapidly as we go in, and if the passage had a telescopic object, the constructors would exert their ingenuity to prevent the possibility of deflection. As respects the square masonry behind these stones, it is singular that the Colonel, who was so very exact in describing how his

works were carried on, and the results he arrived at, does not state how he made this discovery. If these arched stones do not continue, then their intention is prominently to mark the *eye* of the pyramid. In either case it would be the wish of the builders neither to close it or to cover it with casing.

As regards it having been closed, I do not believe it ever was. When Al-Mamoon broke in, it was concealed by the rubbish formed by sand from the desert, and the fallen casing; not being in the centre of the building, he would never have struck the passage had not his attention been drawn to the falling of the stone which had previously hid the ascending passage; he then by scrutiny discovered the entrance passage almost wholly choked up with sand and débris. We know from Herodotus it was open in about B.C. 450; both Pliny and Strabo speak of it as open. If ever closed with long stone corks, as some say, who drew them, and when? It would be no trifling job.

Caviglia in 1817, upon clearing out the entrance passage to the lower chamber, then found there Roman *uncials*, made by the smoke of a torch.

From the remarks of Strabo, it is very evident that he was acquainted with the well as a means of ascent to the upper chambers, and it is a question whether he may not have passed up it. There is one thing which we all complain of in ancient writers, when describing what they saw in their travels, viz., 'paucity of remarks;' but we must remember there were no posts in those days, and all the cost of writing, compared with our times, was a thousand fold greater; it is not at all, therefore, unnatural to suppose they described only those points which struck them most; and as, doubtless, many

things were written from memory, and without notes, whilst some were forgotten, others were confused or erroneously described. Some critics have made a complaint against Herodotus, because he asserts the Pyramids were built in steps, or stages; he supposed, when he said so, people would infer he only spoke of the interior: any one could see how they were finished; but then, as not many years ago, it was a 'vexata questio' whether they were hills cut down, or if built, solid or hollow; he says *solid*, built in stages. We now know he was right, for we find marks in ruined pyramids, which show where the engines used to raise the stones from one stage to the next were placed. Herodotus tells the truth as to what he *saw*, and leaves his hearers or readers to form their own opinion respecting the stories of the priests; and as long as the stone which Al-Mamoon shook down remained in its place, the ascending passage was concealed, and the secret hid. The stone Strabo referred to, may have been that very stone.

Little did the builders ever dream a man would come like Professor Smyth, and detect the marks they made in the floor of the entrance passage, to guide the builders where the ascending passage was to begin, but also by marks on the walls where the arched stones to protect the passage were to be placed: these last being his 'uninterpreted signs.'

Professor Smyth, vol. iii. p. 311, says, 'There are traces in abutments left in the masonry; there were two or three other pairs of similar angularly disposed stones outside, or north of the present ones.' Assuming that this was the case, I should suppose it was a finishing off with Mokattam stone of the same kind as

the casing. Professor Smyth agrees with Vyse, that there would be no object in continuing the arched stone, because they run *horizontally* and the passage is *inclined.* But even in this case the passage would only have to bear the weight of the masonry *between* the arched stones and its own roof, which would be a mere trifle. I must therefore take the same view the majority of writers do.

I have suggested that the casing has been brought down by the shock of earthquakes, and that several of the pyramids have been destroyed by like convulsions. I do not mean to insinuate that the natives have not, when the stones fell, used them, but they did *not* destroy. Vyse, vol. i. p. 272, says, with reference to his attempt made to force an entrance into the south face of the Great Pyramid, 'The difficulties encountered in this undertaking proved how much expense and labour would be required to take down one of these great edifices. The stones must be carefully lowered from the top, or they would be broken, and unfit for any useful purpose; and unless extensive causeways were formed, the ground would soon be encumbered to that degree as to impede all further operations. So wonderfully have these monuments been constructed for duration.'

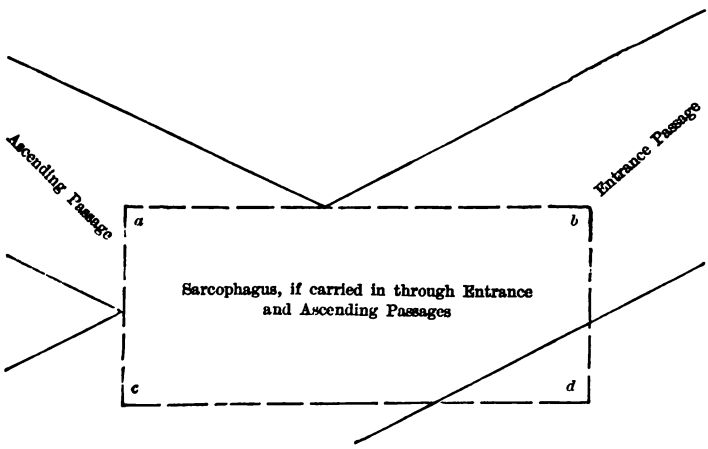
I am well aware that the natives make use of any stones they can obtain with little trouble, in preference to working a quarry; but a moment's reflection will show there would be less labour, time, and expense spent in hewing a stone from the Massara quarries, and conveying it to Cairo, than in extracting an inferior article from the Pyramids and conveying that to Cairo. The

Arabs residing near the Pyramids gladly avail themselves of any stones suited to their wants; Smyth mentions that the well-known tomb excavated by Vyse, and called 'Campbell's Tomb,' has been entirely pulled to pieces by them, and the stones carried away.

It is, however, a question with me, if these rock excavations, many of them so gorgeously decorated, were not rather residences than *tombs*. I believe in nearly every instance there is a vault or mummy pit attached to them or in them, and I am therefore disposed to ask —I am not aware the question ever has been put—may they not have been the palaces of the Princes of Pharaoh in Abraham's time? We decorate our apartments with pictures and statues of departed ancestors. What if the ancient Egyptians decorated their abodes with the highly ornamented mummy cases of their departed friends, and when tired of looking on the resemblances of former generations put them in the mummy pit, the *cellarage* of Shakespeare, as we now consign pictures of departed progenitors to the lumber garret, to make way for their descendants? Does it not show how much in accord we are in our fancies with the oldest of the old nations?

In making these remarks I well know I differ from all Egyptologists, but *that* does not prove I am wrong; it is not an unfair inference that *I am*, when there are so many against me. But is it probable the Egyptians, believing as they did in a future life in another world, should gorgeously decorate tombs in this? We know 'errors as well as truths have much vitality,' and from the time of Herodotus all Egyptologists have been very proud to follow the opinions of those who went before

them. I fancy I shall not be accused of this. To show how persons who are really careful observers, and go about with a measuring-stick in their hands, may be led to follow erroneous opinions, we find Vyse saying, vol. i. p. 287, with reference to the Great Pyramid passages, 'It may be observed that the proportions of the passages correspond with the dimensions of the sarcophagus, and their arrangement seems expressly intended to facilitate the deposition, and to prevent the removal of it.' The accompanying diagram will show,



it would be impossible to introduce the sarcophagus into the King's Chamber through the passages; the diagram represents the passages at the angles and of the dimensions given by Professor Smyth, and the rectangular figure the sarcophagus on the same scale: it will be seen the corners cannot be turned.

Professor Smyth, vol. iii. p. 36, gives the angle of the entrance passage 26° 27′, according to his observations, and on the next page that of the ascending passage as 26° 6′; and vol. ii. p. 36, he gives the mean

height of the entrance passage 47·24, inches, and of the ascending as 47·7, and on p. 118 the length of the sarcophagus 90 inches, and the height 41·3 inches. Thus, any one who desires to do so can test my diagram.

Colonel Vyse was a very respectable old Tory, and I am, I must say, very much surprised he did not remember George III. asking 'How the apple got into the dumpling'? Had he done so, he would not have committed this error.

Is it possible the good old king had been thinking about the pyramid that morning?

But it seems to me the more singular on the part of Colonel Vyse, this mistake, as in vol. ii. he quotes the following authors, who in the course of their remarks incidentally mention their opinions that the sarcophagus was built into the pyramid, and not introduced into it subsequently, viz.,—*Thevenot*, who wrote his travels 1655—*Richardson* in 1817—and *Wilkinson*, who published in 1831.

It is singular to find a man like Dr. Richardson remarking there is no notice made in the Bible of the Pyramids. If all was noted in the Bible, which learned men complain has been left unexplained or not remarked upon, I fear there is no labourer's cottage which could contain the book, concise, simple, and plain as it is; what an amount of dispute has it caused! and any further details would not only be unsatisfactory, but the prolific parent of more disputes.

Many persons have denied both the casing of the Great Pyramid as well as the fact stated by Herodotus, of there being upon it inscriptions. As regards the first, the numerous fragments of casing stones found by

Professor Smyth, all worked down to within less than *half a degree* of the same angle, are proof positive; as regards the latter, we have the agreement of various parties of different nations, who assert that they *saw* them; the mere fact of there being none on the small remnants now on the second pyramid prove nothing; certainly it is not conclusive there were none; as well deny there was any printing on the page of a book, because a blank margin was left round the printed part.

From Herodotus down to A.D. 1660 we have the same assertion repeated by parties who cannot be supposed to be blind copiers of each other, as has been too often the case with writers on the Pyramids, referring to former travellers to help their own memory or observations. What these inscriptions were, and in what character they were written, will now never be known; that they were what the priests pretended to read to Herodotus, is too absurd for any one to believe; probably they were in the most ancient of the hieroglyphic characters, which the priests themselves could not read easily, and we know people of that class are not usually disposed to exhibit their want of knowledge to strangers and infidels: they therefore gave an off-hand explanation, as Chinese priests would do to-day.

In his second volume, Vyse refers to numerous Arabic authors who have written on the Pyramids; at p. 346 he mentions one who died A.H. 654, say circa A.D. 1285–1290, saying, 'Upon them are seven sorts of writing, Greek, Arabic' (this Dr. Sprenger says, in one MS. is called Hebrew), 'Syriac, Musnadic Hieratic.' Dr. Sprenger again says, 'One MS. says *Hiritic*; per-

haps I may suggest *Hieratic* as the real meaning, Roomish Persian.' I only quote this to show there was an inscription extant near the close of the thirteenth century A.D. Again, p. 362: 'Every block is engraved with Musdnad-Hamarytic (? Hieratic or Hiritic, as above) characters, describing charms and talismans and various branches of science.' Also at p. 342: 'The stones were inscribed with ancient writing now unintelligible. The inscriptions are so numerous, that copies of those alone, which may be seen on the surface of the two pyramids, would occupy above ten thousand pages.' This is no doubt an Eastern exaggeration, but it shows that the writer wished to convey the idea of great copiousness. He was born A.H. 557, or 97 years before the first died. Probably there was only one language written, the original of *seven*. Many persons have been of opinion that a superstitious or religious feeling was influencing those who built the Pyramids; we cannot then be surprised if religious significations should be found in them; but I believe Professor Smyth is the first person who has seen any Biblical allusion, which he does in the seven ceilings, walls, and floor of the Queen's Chamber, and the seven slabs in the walls of the Grand Gallery. I can see another sabbatical allusion: there are seven chambers in the masonry, viz., the five attics, the King's and Queen's Chamber; and further, if within a circle a septagon is described and divided into seven equal triangles, the base angles are 51° 25′+. Now, after a very careful examination of the fragments of the casing stones which he brought home to Edinburgh, Professor Smyth comes to the conclusion that the angle they represent is 51° 49′; and that was the angle of the faces of the

pyramid; we thus have the difference between fact and theory, of 23′+, proving that the builders of the Great Pyramid, working by '*rule of thumb*,' were in error only *two thirds of one* per cent.; and considering the few and small pieces of casing stones the learned Professor obtained, if we could obtain more, larger and less fractured, I feel quite sure the error would prove less.

Vyse found two large casing stones *in situ* at the base of the pyramid. He gives the facial angle as 51° 51′; but *all* his angles differ from Smyth's, no matter what they refer to; and as he must have measured there, under the idea of the upper surface being level—and from his remarks made on the work of the south face, I do not believe they were so—here would be some error.

Here, then, we have no less than four distinct sabbatical symbols. Can this be pure accident? I cannot suppose any answer but one can possibly be made.

Again, in the King's Chamber the roof is formed of nine beams of stone (each of the end beams are half buried in the end walls). Is it very fanciful to suppose, if the pyramid was built by or under the influence of an antediluvian, or a religious symbol, there may be here an allusion to the nine generations before the Flood, the birth of one and the death of another never witnessed by mortal eyes?

Professor Greaves, quoted by Vyse, vol. ii. p. 205, who wrote in 1638–9 says, he 'comes to the conclusion that the Great Pyramid was built by Cheops (the same as Chemmis, or Cham, with a Greek termination), whose reign commenced CIↃCCLXVI years before Christ.'

Now, if these letters mean 1,266 there must be an error of one thousand years, or a mistake in printing:

2,266 is much nearer the mark.* He does not say why he writes Chemmis, and immediately afterwards *Cham.* If it is written, as I gather from his words, with the Greek χ (ch), I beg to say I believe the English is the only European nation which pronounces that letter as k—all others sound it *sh* ; in this case, then, the proper reading is Shem-mis, or, without the Greek ending, the Biblical *Shem.* So Kemi is Shemi, or land of Shem, and not *black* land.

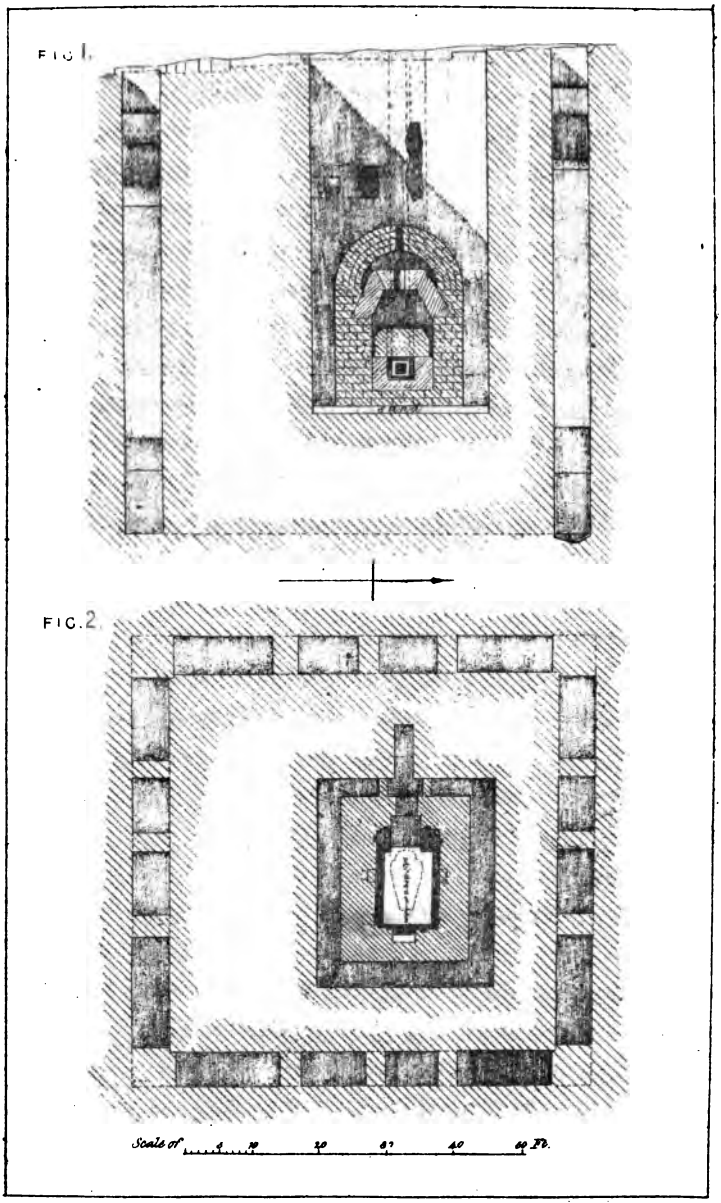
It appears to me there is little more to be learnt at the Pyramids of Gigeh. I do not think it would repay the expense of clearing away the débris, in order to lay bare what may now remain of the pavements, which no doubt surrounded them, and which we know from Vyse did exist, or to find other casing stones still *in situ* in the base of the building.

Any one, however, desirous to work on a pyramid, to him I would suggest to turn his attention to the south stone Pyramid of Dashoor, which Vyse says has a stronger resemblance to the Great Pyramid than any other of those examined by him. It is remarkable for having two entrances, one in the north, the other in the west face; each has its chamber, the north in the solid rock, the west in the masonry; they appear to have been originally connected by a passage, and in each chamber Vyse found a quantity of hewn stone piled up, which he did not remove, and which he thought in each case concealed a sarcophagus; if so, doubtless they are the only sarcophagi in the Pyramids

* If 2266 B.C. is the correct reading, then, it is within fifteen years of my date, Abraham's meeting Shem in 2214 or 67 years after his reign began.

which have not been plundered. By re-opening both passages, and also the passage which connects the two chambers, operations could be carried on freely in an unvitiated atmosphere—one thing which it has always been impossible to have in the Pyramids, and the want of which has been a great obstacle to work.

Colonel Vyse, searching for the subterranean chamber where Cheops, as reported by Herodotus, was buried, excavated upwards of thirty feet below the floor of the lower chamber of the Great Pyramid, but with no success. Professor Smyth appears to think the marks at the entrance of the entrance passage, his 'unexplained signs,' may point to it; but I am disposed to question whether this chamber has not been already found, and overlooked or disregarded; I mean the tomb cleared out by Vyse, and called by him 'Colonel Campbell's Tomb.'



CAMPBELL'S TOMB.

FIG. 1. SECTION LOOKING WEST.—FIG. 2. PLAN.

CHAPTER VI.

THE PYRAMIDS:—*continued.*

THE annexed view is a section of this tomb, looking westward. With the single exception of not being *under* the Great Pyramid, it will fulfil almost to the minutest point the account which Herodotus has handed down. It will be remembered Herodotus is rather confused in what he says; in one place, where he writes most at length, he speaks as if it was not *under* the pyramid but on lower ground, which this tomb is, as it is situated nearer the river.

Under date of April 8, 1837, vol. i. p. 206, Vyse says, 'The building in the centre of Campbell's Tomb was this day discovered.' The operations had been commenced by Caviglia, but at this time were conducted by himself; at the time of discovery, the large excavation in which the building is placed was nearly full of sand: it had been formerly broken into, and thus the sand had drifted in and filled it, which the Colonel, with his limited and poor tools, found it very tedious work to empty. 'It extended east and west, and was covered in by a perfect arch. The walls were of white stones, which, though not remarkable in point of size, were well jointed and finished, and, excepting the arch, the masonry had the appearance of Grecian

architecture.' There were two apartments, one below the other. 'A passage had been forced into the western end of the upper apartment, and in the centre of the roof was a circular opening, into which a stone stopper had been fitted, with a small hole in the middle of it lined with coarse pottery, for the circulation of air. The floor of this apartment was flat down the middle, but sloped off on each side to the springing of the arch; and in the centre immediately below the hole in the roof was a similar aperture, which had been fitted with the same kind of stopper. These stoppers were lying near the apertures. The lower apartment, or tomb, had a regular entrance at the western end. From the upper apartment, which was seven or eight feet high, I entered by the air-hole already described into the lower, where an immense stone, supported on each side by masonry, had originally formed a complete covering to a most magnificent sarcophagus placed below it. Several rows of hieroglyphics were engraven on the lower part of this stone, also upon the sarcophagus and the lid. The end of the stone over the sarcophagus had been broken off, and the lid was lifted up about fourteen or fifteen inches. The place was nearly full of sand, and the smoke of a lamp or candle was visible in various parts. At the foot of the sarcophagus was a square pit about nine feet deep, and lined with masonry; it had two air-channels near the bottom, and a row of characters, many of which were *not* hieroglyphics (the italic is mine), inscribed on one of the walls. It was at first supposed to communicate with a lower tomb, but this was not the case.' The next day, having cleared out a

quantity of sand, we found the sarcophagus entirely empty, excepting a few trifling ornaments of stone. The cartouche of Psammeticus II. was not on the sarcophagus, although it appeared in a line of hieroglyphics inscribed in a hollow groove round the inside of the central excavation, in which the building was placed. The fosse, which surrounds the central excavation, had been arched over, for some of the stones remained; the remains of stone arches are also to be seen in the apertures of one or two of the adjacent shafts; so there can be no reason for supposing, from the existence of an arch, that the sepulchral chamber was posterior to the excavation. But the most extraordinary thing is, that the building was found to rest on a stratum of desert sand, beneath which sand was the solid rock, without shaft or aperture of any kind. People have passed entirely under the building. It is therefore to be concluded, that after the central excavation had been made, it was filled up to the top with sand, that the tomb was built upon it, the sarcophagus and large stone placed over it, probably on account of the difficulty attending such operations at the bottom of the pit, into which it was gradually let down by taking out the sand, in the same way as the lining of a well is lowered.'

In the remarks by Mr. Birch, quoted by Vyse, on this tomb, he appears to attribute it to the era of Psammeticus, but I do not think this follows merely because his name is found on the building; it was not found on the sarcophagus, but was entirely independent, and probably only records an examination by

that king, or his orders, of this tomb, which was even then known to be of some great personage.

Some Egyptologists have an opinion there was a worship of Cheops at the time of Psammeticus; there might have been a kind of revival of an interest in him, as we see in our times occasionally a great temporary excitement raised about some former great man. But we have the authority of Herodotus to prove (and the more we know of the old traveller, the more is he to be trusted) that when he was in Egypt, circa B.C. 460–450, there was nothing but hatred felt towards Cheops. Tablets and inscriptions appear to have been renovated; but this is nothing more than the regilding or adorning a tomb in an English cathedral or church, making it more sightly and the inscription more legible.

Little remains now of this tomb, whether of Cheops or not; it has been pulled to pieces stone by stone by the Arabs, and from what is said by Professor Smyth I infer little remains on the spot but the large sarcophagus. Had Marriette Bey been in authority a few years sooner, this vandalism might have been prevented.

From Vyse's remarks, vol. i. pp. 274, 275, it would seem that the ancient Egyptians sometimes endeavoured to place their sarcophagi in such positions as to be surrounded or protected by an influx of water into the chamber, from a crevice in the rock. He says, 'I examined the shaft to the north of the Sphinx. The tomb was an excavation in the rock; an outer chamber conducted to two others, one to the north, the other to the west; both contained shafts. As our object was to ascertain the level of the water, we only cleared out

the shaft in the north chamber, which was found to contain a sarcophagus in a grotto or recess.' 'The shaft to the westward of the Sphinx was in a tomb formed in a ledge of rock, and from the bottom, apartments had been excavated east and west; that to the east contained a sarcophagus of granite covered with hieroglyphics, the lid of which had been removed. Out of this apartment was another to the north, with a recess on the east side, and two passages branched off towards the south. They had been already plundered, and contained only a small quantity of sand, a few large stones, and *shallow water*, which stood at the depth of four inches within the sarcophagus, and must have been therefore as high as the top, unless it had been placed there by modern explorers.' The italics are mine; and as I cannot suppose any traveller would be at the trouble to put water into the sarcophagus, it is evident that sometimes, if not every year, the inundation brings water through some channel, so as to cover this sarcophagus. These observations were made at low Nile, and I gather from the Colonel's observations that the river rose in 1837 above 20 feet 6 inches.

It may be that the square pit with two air-channels at the foot of the sarcophagus in Campbell's Tomb was a well, with passages intended to communicate with crevices through which the water might flow into the tomb, as described by Herodotus, these crevices having since become stopped up, either by river deposit or fall of rock from earthquakes. If this happened about the time the great change took place in Egypt, in Joseph's administration, some years after, the water being absorbed, the tombs would become accessible to plun-

derers. It is very evident, from some of the characters not being hieroglyphics, that the tombs must have been of a very ancient date, probably before the hieroglyphic writing became quite settled. And probably, as the cartouche of Psammeticus is not on the sarcophagus nor even on the tombs which contain it, the tomb was only visited then. There were other sarcophagi found between the fosse and the excavation in which the tomb was, decidedly of a more modern date than that in the tomb, probably of persons who wished to be buried near some one of great repute or sanctity, and as it were within the precincts of his vault; they may have been buried there before the central excavation became accessible from the fall of the water.

Vol. i. p. 201, he says, 'The sand had now been cleared out in Campbell's Tomb to a level with the grotto, communicating with the shaft at the south-west corner, in which a sarcophagus was found on February 11.' Again, p. 214, 'The sand was cleared out from a rough grotto, that was at the bottom of a shaft at the south-east corner of Campbell's Tomb, and that also opened into the central excavation. It contained three sarcophagi; all had been plundered.' Vyse gives the square of the inner side of the exterior excavation or 'fosse' as fifty-seven feet three inches, and the width of the 'fosse' five or six feet; the central excavation in which the tomb then was, as thirty feet six inches east and west, and twenty-six feet three inches north and south. In vol. ii. p. 249, he says, 'The bottom of the fosse was five feet two and a quarter inches above low Nile of 1837.' We can see it would not require much change of level to permit water to percolate.

We have no data by which to estimate the changes of elevation in Egypt. Vyse says the Gigeh plateau was once evidently a moderately fertile plain; Herodotus says the same; how has this change been caused? Is it possible the earthquake which enlarged the passage at Silsilis also opened the present channels through the Delta, or materially enlarged them, thus changing the course of the river? The object of the construction of this tomb would then be defeated. Here, again, the movement of the people by Joseph seems to find an explanation. We know from Herodotus, as well as from observation, the main body of water must at one time have run through the Bar-bela-mar, though it is not at all probable it was stopped up by Menes.

In Rawlinson's 'Herodotus,' vol. ii. p. 17, I find, 'One fact which I learnt of the priests is to me a strong evidence of the origin of the country. They said when Moêres was king' (Joseph's second king, according to me), the Nile overflowed all Egypt below Memphis as soon as it rose so little as eight cubits.' I beg here to remark, that perhaps between that time and his visit the length of the cubit had been gradually reduced: nothing was more common in old times, than for kings to deteriorate or reduce the currency; why may not traders, for gain, have done the same with measure? Moses is very stringent in his law upon this point, of just, true, and fixed measures, to deviate from which is cheating and robbery.

I shall allude again to this. 'Yet at the present day, unless the river rises sixteen, or at the very least fifteen cubits, it does not overflow the lands.'*

* The rise of the river may be considered as very regular; 8 cubits

Vyse found the rise, the year he was in Egypt, nearly twenty-one feet; fifteen cubits at eighteen inches are equal to twenty-two feet six inches; from the words of Herodotus, one may suppose *that* would be a 'good Nile;' Vyse does not say if 1837 was a 'good Nile' or not. And on the next page, '*If*, as I said before, the country below Memphis, which is the land which is always rising, continues to increase in height at the rate at which it has risen in times gone by, how will it be possible for the inhabitants of that region to avoid hunger (starvation?) when they certainly have no rain, and the river will not be able to overflow their corn lands?'

Now, as this has not taken place in 2,300 years, it stands to reason either the cubits are different or that the land has been raised in some other way than by the river, perhaps both; but here are no allusions to the land being raised by alluvial deposits. It is true, in another place he speaks of the land 'being alluvial, and formed of the deposits brought down by the river from Ethiopia.' But here he speaks of it as 'rising and growing.' It appears to me, he was well aware a double process was going on; and it may be asked, if Strabo knew of the effect produced by earthquakes, why may not Herodotus have known it also?

It has been very generally assumed that Herodotus states Cheops to have been buried in an insulated tomb *under* the Great Pyramid. But if we consider his words carefully, I do not think this is the correct meaning. In vol. ii. p. 200, referred to, there is, 'It took ten years of oppression of the people, to make

for a *good* Nile being equal to 16 cubits, shows one cubit was 3 feet, the other 1½ foot.

the causeway for the conveyance of the stones—a work not much inferior, in my judgment, to the pyramid itself. This causeway is five furlongs long, ten fathoms broad, and eight fathoms high at the highest part. To make it took ten years, as I said, or rather, to make the causeway, the works in the mound where the pyramid stands, *and the underground chambers which Cheops intended as vaults for his own use*; these last were built on *a sort of island*, surrounded by water introduced from the Nile by a canal. The pyramid itself was twenty years building.'

The italics are mine. Can any words be plainer? Do they not distinctly divide the work into two periods of ten years and twenty years respectively? Can any description be more explicit, and does not Campbell's Tomb answer every requirement, with the single exception of the canal, which no doubt has long since been buried in the alluvium of the Nile?

It is very true, p. 206 Rawlinson gives the following as the words of Herodotus, in speaking of the second pyramid: 'It has no subterraneous apartments, nor any canal to supply it with water as the other pyramid has; In that, the Nile water, introduced by an artificial duct, surrounds an island, where the body of Cheops is said to lie.'

Now it is perfectly evident from this, that Herodotus *was* in the lower chamber of the Great Pyramid; the passage *must* then have been open, and he thought the unfinished passage on the south side of that chamber did lead to the island where Cheops was buried. Let me here remark that Campbell's Tomb lies about south-east of the Great Pyramid. We can also see Herodotus

of the inundation.' Here in a note he says, 'This is very uncertain, and may mean Ra, the abode of Ra, 'Saouti justified.' The following page, 'The four first lines to the left of this contain "the prayer of the Osirian military chief, superintendent of the signet, chief purifier; scribe of the divine books of Amoun-ra-souher . . . scribe of the viand of. . . . prefect of the abode of the inundation (Nileometer)." '* But nothing like basilico-grammeteis; which makes me ask, Is it possible Phaishop was scribe or author, writer of the basilico-grammeteis? Herodotus says, and Africanus confirms it, that he wrote sacred books. Scribe, appears to have been an honourable appellation; we find Joseph, 'the second in the kingdom,' in the picture of the thirty-seven Jebusites, called 'the good scribe Joseph,' or 'good Joseph the scribe.' I suppose a prime minister would be 'a scribe,' though we should hardly feel disposed to call him a *clerk*.

But here I will leave the subject, and cannot but feel satisfied that this is the veritable tomb of Cheops, described by Herodotus, so long looked for in vain under the Great Pyramid, and where the body of our Biblical Shem was laid.

I beg now to refer to the Arabic MS. of Masondi. Masondi takes his account from an old Coptic papyrus; he wrote A.H. 345, or say A.D. 967.

Vyse, vol. ii. p. 330, gives the following account of this papyrus, which I hope I may be forgiven for transcribing at length, with most of his notes.

* We have before, Mr. Birch describing the superintendent of the abode of the inundation, as meaning the superintendent of the 'abode of Ra,' but here it is Nilometer.

'Papyrus found in the monastery of Abou Hormeis. Translated into Arabic A.H. 225 or A.D. 847.

'It is said, that in a tomb at the monastery of Abou Hormeis, a body was found wrapped round with a cloth, and having on the breast a papyrus, inscribed with ancient Coptic characters, which could not be deciphered until a monk from the monastery of Al Kalmoun, in the Faioum, explained it as follows.' Here follows a note by Dr. Springer. 'This story is related by Masondi, but this relation of it by Al Kodhai is given, because he was a Cadi in Egypt, and mentions the persons by whom the tradition had been handed down from former times! "In the first year of King (? Emperor) Diocletian, an account was takên from a book, copied in the first year of King Phillippus."'

If this means Alexander the Great, he, to an Arabian, would be 'ben Philippus,' and the first of the ben Philippuses, or 'beni Philippus.'

Here Dr. Sprenger says, 'Moses of Chorene seems to allude to this account when he mentions that Valasarces sent to his brother (the Governor of Armenia) a learned man called Mariba, to enquire into the ancient history of Armenia. This person is supposed to have found among the archives of Nineveh, a book translated from Chaldaic (? *Coptic*) into Greek, by order of Alexander the Great, which contained historical records of the greatest antiquity.'

Perhaps I am a very imaginative person; but I think there can be seen a distinct connection between the ben Philippus and the Coptic papyrus; the account taken in the time of Diocletian, of the Greek translation by Alexander, of a Chaldee work, or, as I have suggested,

Coptic; as Moses of Chorene must have known more of Chaldea than of the country of the Copts, he *might* be tempted to *correct* an error. Dr. Sprenger proceeds, 'Valasarces ordered them to be inscribed on a column; and the author derived from this monument a considerable part of his history. Cedrenus also says, upon the authority of an apocryphal work ascribed by the Egyptians to Hermes, that Enoch, foreseeing the destruction of the earth, had inscribed the science of astronomy on two pillars' (are these two pyramids?) 'Cedrenus was a monk, and lived about A.D. 1050.'

Josephus, I believe, mentions the same story of Seth (who perhaps was Hermes or Shem), and it has been thought he was led away by the 'stella' of Sethos Ramses near Beyrout; but may it not be that both Josephus and the two books of Hermes have their origin in the inscriptions on the Great and Second Pyramids, and the sacred book of Cheops or Shem? The Hebrews, supposing Melchizedek to have been Shem, would not have connected him with Egypt. Again, we well know the Pyramids must have had an astronomical object, and we find these books of Hermes were written to hand down that science. Are not these points worth consideration?

Here we have Alexander B.C. 325; Diocletian A.D. 290; the Arabian translation A.D. 847; and Cedrenus A.D. 1050, or a chain, *such as it is*, extending over 1,375 years. Some people will exclaim, 'Where is the papyrus.' To such I shall say, 'Where are the original writings of Horace or Livy?—I won't go back to Homer, or whoever wrote the "Iliad"—nor even to Herodotus. I think we have a clue as to what the Gordian knot of

Alexander was, and how he cut it, by a compromise between Hebrew and Egyptian chronology.'

But to proceed with the papyrus—'First year of King Philippus, from an inscription of great antiquity written on a tablet of gold, which tablet was translated by two brothers, Ilwa and Gercha, at the request of Philippus, who asked them how it happened they could understand an inscription which was not intelligible to the learned men of his capital. They answered, because they were descended from one of the ancient inhabitants of Egypt, who was preserved with Noah in the ark, and after the Flood went into Egypt with the sons of Ham, and, dying in that country, left to his descendants (from whom the two brothers received them), the books of the ancient Egyptians, which had been written 1,785 years before the time of Philippus' (putting Alexander in B.C. 325, this is B.C. 2110), 946 years before the arrival of the sons of Ham in Egypt, and contained the history of 2,372 years; it was from these books that the tablet was formed.'

In a note apparently his own, Vyse says, 'A French author (no name given) remarks that it is possible in A.H. 225 an Arabic version from a Greek translation of an ancient MS. was found, which may have related to celestial observations, and to the construction of the Pyramids.' It is *very* singular in these old myths, or whatever they are, to find not only astronomy connected with the Pyramids, but also a tradition that they were built for preservation from a deluge, seeming as if they had been built by Arkites, as symbols of their salvation.

We find here these two brothers say they were

descended from an ancestor who came into Egypt with 'the sons of Ham,' that is, he was *not* a Hamite himself. In Gen. x. the descendants of Joktan, who was a Shemite, are given. Did these two brothers descend from some of them? Were the notes of Shem or Cheops transcribed by their ancestors some years after the erection of the Great Pyramid and Shem's death? From the time of Abraham's visit, we cannot suppose the Great Pyramid could have been finished much before B.C. 2180.

Let us pause a moment and consider. Herodotus says certain books *were* written; Africanus tells us that he himself possessed those books, or copies of them. Here we have a *tradition*. Is tradition correct? Is it not a *record or history* of certain books between the two dates? I suppose history would be thought too strong, and in an *un*certain way a connection with Armenia has been pointed at. Is it possible the Magi who came to Judea obtained their *tradition* of the 'Star of the King of Israel' from these books? If so, that star, on its first appearance before the Deluge, in a time of anger, is the star for whose return the telescopic passages of the Pyramids were built or excavated.

But to go on; 'The contents of the books were, "We have seen what the *stars* foretold; we saw the calamity descending from the heavens and *going out from the earth*, and we were convinced the waters would destroy the earth, with the inhabitants and plants thereof. We told this to the King Surid ben Shaluk; he built the Pyramids for the safety of us, and also as tombs for himself and his *household*."'

Dr. Sprenger says, 'As there are two readings at this

place, it does not appear the meaning of the original was clearly known.'

But there is here a wonderful accord with our Bible: *the inhabitants and plants to be destroyed*, the water from above as well as eruptions from the earth; and though I cannot imagine any resemblance between *Surid* and *Noah*, I can between Shaluk or Shaluck and *Lamech* or *Lamuk*.

Then follows some account of the Pyramids, and who were buried in them, and 'then the two brothers calculated what time had elapsed from the Flood to the day when the translation was made for King Philippus; and it appeared to be 1,741 years 59 days and 23 $\frac{59}{400}$ hours. In this manner were the Pyramids built. Upon the walls were written the mysteries of science, astronomy, geometry, physic, and much useful knowledge, which any person who understands our writing can read.'

Dr. Sprenger says, 'This was translated into Arabic from Coptic, A.H. 225, supposed to be 4,321 years after the construction of the Pyramids.' He also adds, 'An account of the appearance of the heavens, when the waters subsided, is also included.' I regret he did not give this, though it is very possible it might not prove intelligible to our astronomers.

Let us examine the dates; A.H. 225, or A.D. 847, deducted from 4,321, will leave 3,474, or the date when the pyramid was said to be built; if we with our own separate knowledge assume 2200 B.C. as the time, and add 1,200 years for a revolution of α Draconis, we are in B.C. 3400. Probably, 'the star' did not exactly correspond with α Draconis.*

* In a subsequent chapter I shall refer to α Draconis, and why.

Taking the first year of the reign of Alexander the Great as B.C. 325, and adding 1,741 years, we arrive at 2066, which is nowhere near the date of the Deluge, but within one hundred years of that great change in the Nile inundations which was the cause of the years of plenty and the following famine, which was universal, and must have happened within twenty years of B.C. 1985. The two dates may have been confounded. For it will be noted that this original book is said to have been written 1785 years before the time of King Philippus, say 325–322 B.C., and forty-four years before the Deluge, which took place 1,741 before the translation. Next we have the statement, 'This book contains the history of 2,372 years, evidently before the building of the Pyramids, which were to be a place of refuge.' Can this have any connection with the first *nine* chapters of Genesis? Is it possible it was from this gold tablet that Moses obtained a part of his information? Inspiration would direct him how to throw out any extraneous or false additions. The antediluvian chronology in Genesis sums up to 1,650 years; to this add Noah's life after the Deluge, 350 years, and the 371 days or years of the Deluge, and we have 2,377.

As regards the '946 years before the arrival of the sons of Ham in Egypt,' I am disposed to think this is not a correct rendering of the meaning, which in my opinion is '946 before (*whom or whose time was*) the arrival of the sons of Ham in Egypt.' It is not to be wondered at if the correct idiom was not clearly comprehended. Dr. Sprenger says the Arabian translators do appear in places confused.

Professor Greaves says the Pyramids were built by

the sons of Ham, who arrived in Egypt in 1266 B.C. He does not say how he arrived at this date; if he had this old Arabic MS. for his authority, and took Philippus to be Alexander, and the first year of his reign in B.C. 320, we shall have B.C. 1266. But as the books were written by one who came into Egypt with the sons of Ham, it is evident that 1,000 years have dropped out; this will place their arrival in B.C. 2266, as near as possible, or sixty-four years after the death of Noah.

Finally, we have the books from which the gold tablet was formed, written 1,785 years before Alexander, after the Pyramids were built, or say, B.C. 2110, about sixty years from Professor Smyth's date of the pyramid, and about one hundred from mine. But if the star was expected in 2170, the Pyramids must have been built before that date. There is not, therefore, so much difference between Professor Smyth and me as forty years. The Priests said, that after his misdeeds Cheops repented, and wrote a second book. Does not this imply the book was written after the pyramid was finished?

The Pyramids were to be a refuge from the Deluge —*an ark*. They are said to have been built B.C. 3474, or within one hundred years of the time when the Lord, as I have supposed, declared his intentions to Noah, and when perhaps the first orders to construct the ark may have been given.

I suppose it will be said, this is an Arabian fable, and it may be asked, *can* there be any truth in it? To the last I reply, Yes, there is some truth in it; no doubt there is fable also. To the first, I do not think it is an Arabian fable: it does not purport to be of Arabian

origin, though no doubt by Masoudi and others it has been adapted to Arabian taste; still, Dr. Sprenger says, several of the expressions used are decidedly *not* Arabian.

With respect to the dates, if any come within a hundred years of any event to which they allude, it appears to me very near, when we consider there could have been no detailed written record of events, nothing but memory to hand down to tradition that the history has been twice written, and twice if not thrice translated. Some allowance surely ought to be made.

Thus, 3474 B.C. being within 105 years of the assumed first appearance of α Draconis,* or whatever star was observed for the angle of the Pyramid passages, causes me to feel certain that the two events so indicated are the same.

The date 2066 B.C does not agree with the time of the Noachian deluge; but it will be remembered the original tradition is said to have been handed down by one who was in that deluge, and as the tablet was written after his death, the date of 1785 before the time of Philippus must be also subsequent. The date of 1741 before Philippus, in 2066 B.C., is within eighty years of the Josephine time, and I cannot but believe alludes to some very great rise of the Nile at that time.

The statement of 2,732 years, I think I have already satisfactorily explained, as well as the 946 years relating to the sons of Ham.

The LXX make the antediluvian chronology 2,662 years; had they this term of 2,732 in their minds when they made the elongation? They must have known of it. Is this another proof of the kind of knot Alexander cut?

* See Chap. x.

The gold tablet appears to me to have been engraved between the completion of the Pyramids and the Josephian deluge.

We can trace these traditions through Herodotus, Alexander, Diocletian, Cedrenus, Maseudi, and down to Professor Greaves, who in the eighteenth century took his date of the sons of Ham entering Egypt from this Arabian tradition.

It is rather singular to find two Pagan Emperors like Alexander and Diocletian mixed up in the same affair. Alexander no doubt took a very great interest in the Jews, and also in the Jewish Scriptures.

There is enough in these Arabian MSS. to cause them to be received with respect, if not as corroborative evidence; and I think they are more to be depended on than anything we have had handed down of Manetho; his scraps and fragments, though made so much of, are only copied by men who deny them and endeavour to prove their falsity, whilst these Arabian writers hand down this history or tradition, apparently with full trust in it, but in which we can detect errors. Is there any man who believes in Manetho, even when he puts him forward?

Then, again, we have Herodotus confirmed by the discovery of Cheops' tomb, in Campbell's tomb, as well as in this translation of the gold tablet, also the papyrus, stating a shepherd king, prince or chief, had been well received and benefited by Pepi, Phiops, Cheops, or Shem, corroborating the story of Philition as well as the Bible. Surely this is very extraordinary!—the 'father of history,' as he has been called, and an Egyptian papyrus, both confirming Gen. xii.

Is there *any* document of any kind confirmatory of Manetho? And will anyone henceforward set him up as authority?

I think, too, that learned men may as well write a little more cautiously about what they are pleased to call 'Biblical or Hebrew tradition.'

In this papyrus the Pyramids are described as built for a refuge from the Deluge. May we not suppose they were meant to be as a symbol of a refuge, that is, the ark?

Professor Smyth gives the length of the north face of the Great Pyramid, measured by Mr. Inglis, as 9,120 inches—probably the exact length of the ark; 9,120 inches divided by 300 give 30·4 inches as a cubit—about a pace. Herodotus says in Mœris' time the Nile rose eight cubits; but in his time it rose fifteen cubits in Egypt. I believe the rise in both cases was about the same, the measures being different; fifteen cubits are about twenty-two feet; eight cubits of (30·4) are twenty feet four inches, which is very much the same as Vyse found the river rise. Mind, neither are said to be exact, or average rises. These are speculations of no real importance, but they will interest some persons. If I am right, and the arkite cubits were two and a half feet, we have 750 feet for the length of the ark, and seventy-five feet for its depth. As it would, when loaded, be immersed *at least* two-thirds, it must have drawn fifty feet of water, or 26·66 cubits, therefore could not float over the highest hills, which were covered only fifteen cubits, if they were immersed that depth! As fifteen cubits were enough to destroy all human life, as well as crea-

tures and plants, we see the Almighty did not put a needless quantity of water on the earth.

Nothing apparently would be more natural than for Shem, in opposing gross idolatry, to erect a memorial of God's mercy in saving his father's family from the Deluge, as an everlasting symbol or sign of the fact, to continue to all generations.

Jeremiah, who, if he did not write in Egypt, wrote after he had been there, says, 'Thou hast set signs and wonders in the land of Ham.' These words cannot in any way apply to God's dealings at the time of Moses, for all signs of those dealings had entirely disappeared from the land of Egypt before the time of Jeremiah.

Some imagine Job refers to the Pyramids; I do not. I believe he refers to the ancient practice of burying chieftains in tumuli.

We can thus see a religious reason for the erection of the Great Pyramid, a desire to commemorate the salvation of the family of Noah from the Deluge; but it will be asked, Why, then, was it not built sooner, and why build more than one? When I ask myself these questions, I at once see there was a deeper religious signification.

Herodotus says, the priests informed him that Philition urged Cheops to build the pyramid called after him. Jewish tradition (not the Bible Professor Ewald) relates that Abram conversed with Pharaoh on religion. It is not probable that conversation with Shem related only to the Deluge. No doubt Abram told his ancestor of God's promise to him. Our Saviour says, 'Abraham saw my day and rejoiced in it.' Did he also then communicate to Shem the advent of the Messiah,

the Star, would not take place for centuries to come? And did Shem leave the telescope in the Great Pyramid open, so that any one could come and observe?

In Bunsen's fifth volume, p. 719, there is an inscription given relating to the Great Pyramid, evidently of the time of the builder, Cheops, or whatever his name may have been. The translation runs thus: (p. 721) 'The living Horus, the Conductor, the King Khufu, the living; he designed the temple of Isis, the Ruler of the Pyramid, near the house of the Sphinx, above the north-west of the house of Osiris, Lord of Rusta; he built his pyramid near the temple of that goddess.' Perhaps God or Deity.

'The temple' (more likely house, as above), 'of the Sphinx of Harmachis, on the south of the house of Isis, Ruler of the Pyramid, to the north of Osiris, Ruler of Rusta.'

It is well known where the Sphinx and pyramid are. Between them is that grand temple, called by Smyth 'King Shafres' Tomb,' and fully described in his first volume, p. 338. This, no doubt, is the temple of Isis. Who was Isis, and what was the original worship of this divinity? If it was a Deity worshipped by Shem, we must take it for certain that the worship had become fearfully corrupted when Plutarch wrote.

It is a good plan, in translating any language, to place the words translated in various positions: we cannot by so doing really alter the meaning, but may make it more clear; if we do this with this translation, we have, 'King Khufu, the living Conductor, the surviving Horus.' We know that Horus was the son of Osiris, and all Egyptians considered Osiris their spiritual father, called their kings sons of the Horus, and a deceased

person Osirian, in the Ritual of the Dead; Bryant considered Osiris and Noah as the same. Shem also here appears as the living or surviving Horus, or son of Noah or Osiris, who conducted the people into Egypt. 'He designed the temple of Isis,' our Eternal God, to whom also he dedicated his pyramid, as is very evident by the words which in each sentence immediately follow upon Isis, viz. 'Ruler of the Pyramid.'

As regards the translation of the characters into land of Rusta or Rosetta, I am not disposed to agree with the translator. Rosetta was not known to Cheops. How, then, could Osiris have been ruler of Rosetta? It must mean 'plain' or 'pleasant' or 'south land,' all which might be applied to the earth of which Noah during his life was ruler.

Here we have a difficulty in reading these old inscriptions by a language which was formed 2,000 years after.

I therefore fancy Shem built the pyramid as a symbol of his being saved from the Deluge, better for such a purpose than as a vain-glorious mausoleum.

But why build *three* pyramids? And why two of nearly the same size, and with their '*diagonal*' in the same line? Is not this design? Can it possibly be accident?

May we see in the three pyramids the *three days* or divisions of man's life—the ante-diluvian in the third or smallest pyramid; the post-diluvian or pre-Messiah in the second; and our present day in the Great Pyramid? It would be a curious thing if the relative cubic contents of the second and third are at all near to twenty-six and sixteen, the number of centuries of the two first days respectively of man's life.

There is something very significant in the masonry of the second pyramid. Smyth, vol. ii. p. 251, and following, remarks, 'Mere difference of size is not, however, the only arguments which can be urged in favour of the Great Pyramid, as Sir G. Wilkinson has very gently put it. "The style of building in the second pyramid is inferior to that of the first, and the stones used in its construction were less carefully selected;" while Howard Vyse more boldly describes much of it, as being only a kind of gigantic rubble work. Yet neither these, or any other observers I am acquainted with, have noticed that all the above animadversions apply only to the lower half, or rather more, in vertical height of the structure, whose *upper* half, so far as it can be seen, suddenly takes on a perfectly new and improved style of building—a style, indeed, which is even more square, regular, and solidly put together than that of the Great Pyramid itself.' He says, and here I do not agree with him, for I believe this difference was *designed*, 'On turning again to the second pyramid, you saw there had been two architects, two times of building long removed from each other (this, let me say, is directly opposed to the Abou Hormeis papyrus), and two entirely different styles of workmanship which do not blend into each other.'

Now, perhaps I may be accused of being as bad as an old Egyptian fabulist; but I can see here a very decided resemblance to the second day of man's life, begun in gross ignorance, without the knowledge of letters. How different was the ending! And when and how did letters rise and become known? Doubtless they originated in Egypt, before the Exodus, and were carried by the Hebrews into Palestine, from whence

Cadmus is said in B.C. 1491 to have carried them into Greece. The Hebrews, crossing the Jordan, let it be remembered in B.C. 1515, must have at once become acquainted with the Tyrians or Phœnicians soon after the time of the birth of Cadmus.

If these 'cosas' of mine are approved of—and they are very harmless ones,—perhaps a resemblance may be seen in the Great Pyramid to our day, the greatest and most perfect of all, owing to the spread of the blessed Gospel.

As for myself, I am quite disposed to go even further, and recognise in these three mysterious works three symbols of God's three covenants with mankind since the Deluge; namely, the covenant of the Bond with Noah, of the Law with the Hebrews, and of Calvary with the world.

We know nothing of what the Fathers of old knew of the Saviour: they *did* have a revelation, which was lost or mystified in tradition; we see traces of it, but we cannot follow the clue.

But in the Great Pyramid *not* finished, I can trace the third covenant, which was not to be finished by man's hands and not complete in this world.

And these mysterious monuments, the sole remaining of the seven old wonders of the world, from what Professor Smyth says are in a state of decay, and probably from his account, and the nature of the stone of which they are built, decay, when it has made a certain advance, will proceed at an increase of speed.

Whence did the name arise of pyramids? There have been guesses or suggestions made. Has it ever been suggested, from two Egyptian words, *pi*, 'the,' and *romi*, 'men'?

In bidding the Pyramids good night, allow me to say, that if my religious ideas are approved of, not to me be the credit, but to Professor Smyth and Mrs. Smyth, for their labours at the Great Pyramid, and his pointing out the Sabbatical signs he remarked, which 'shunted' me on to a line of rail I was unable to escape from.

In his first volume, p. 467, the Professor says, 'Yet the open-mouthed world has not been always right in momentous questions of religious faith; and it may be following the improvement inaugurated by the late John Taylor, viz. the method of considering all the facts from a Christian point of view, that the real reason was that King Cheops, being no atheist, but on the contrary a zealous and Elijah-like worshipper of the one true God, in spirit and in truth, took every method which was open to him for trying to wean his besotted subjects from their degrading animal worship, and for showing them practically that their gods in whom they trusted were no gods.'

These remarks allude to a tradition that Cheops so detested idolatry, that he caused figures of the Egyptian gods to be engraved on roads, that they should 'be trodden under foot by man and beast.'

In a few instances I have been bold or foolish enough to differ from Professor Smyth, for which I hope he will forgive me. He and Colonel Vyse are the only men who have any right to write upon the Pyramids; the Colonel can do so no longer.

A friend suggests, 'Pyramis,' being a Greek word, may have sprung from *Pi-ra-muo*, 'I conceal (hide or *bury*), the king.'

CHAPTER VII.

DYNASTICAL COSAS.

The secret things belong unto the Lord our God, but those things which are revealed belong unto us and our children.—Deut. xxix. 29.

Who has set mighty signs and wonders in the land of Egypt. —Jer. xxxii. 20.

For there is nothing covered that shall not be revealed; and hid, that shall not be known.—Matt. x. 26.

LITTLE did I think, when, over twenty years ago, on my return from some years' residence on the banks of the Ganges, I saw the Pyramids from Cairo, I should ever be tempted to write on Egyptology, a subject which seems to be the most peculiar of all peculiar subjects—if one may say so, 'the pet preserve of Queen Mab.' Manetho, in his mysterious relation, has a wonderful power over the human mind, and it has become a saying, 'When Egypt did not find a man mad, *it drove him mad.*'

I was led into taking up the subject by Professor Smyth's cry, 'What are these dynasties?' and when I came to his remark, that 'in some cases a king was last of one dynasty and first of the next,' it seemed to me at once, as a poet would be allowed to say, *by*

inspiration, 'they are not dynasties, or *families*, they relate to time!'

Upon this, I set to work to unravel the web, or untie the Gordian knot. One end I had; for Manetho, in B.C. 280, said they had expired about one hundred years before, say circa 370. I found the paintings of the 'brickmakers' were by all Egyptologists and hierologists associated with the eighteenth dynasty; and as the Exodus was put by general consent about B.C. 1491, if we deduct 370 from 1491, we have 1,121 years against twelve dynasties (18+12 are 30), or an average 93½ years; knowing what a difference would happen if we are aware what part of a century an event occurred in, would make in such an average, I at once said, '*Is it possible* a dynasty means one hundred years?'

Eratosthenes says, the three first dynasties did not exceed 339 years (see Osburn). Manetho, according to Josephus, said the five Hyksôs dynasties, thirteen to seventeen inclusive, did not amount to more than 511 years, though the kings' reigns given exceed 2,100. If I add these eight dynasties and 850 years to my previous figures, I have twenty dynasties and 1,971 years: average, 98½ years.

But, as I have already shown the Exodus was in B.C. 1555, not 1491, I have a further amount of sixty-four years to add to 1,971, making 2,035 against twenty dynasties, an average of 101½ years; and 101½+98½ are 200, which, divided, gives us exactly a century, supposing the dynasties ended in B.C. 370. It has always seemed to me something very extraordinary—a fascination there was no way to account for

—how people continually repeated the names of Manetho's dynasties; he calls the fifth dynasty Elephantine; now we know from Geology, and the rock records near Semneh and Silsilis, that until near the end of the twelfth dynasty, the Island of Philœ, (from which this dynasty must take its name), if not liable to annual overflow, was a rock in the middle of a lake, swamp, bog, or morass. How, then, could a race of Sovereigns spring from it?

Again, Colonel Vyse, as I have quoted, tells us the first mention of Thebes is in the time of Amosis, the first king of the eighteenth dynasty. How, then, can the eleventh, twelfth, and thirteenth dynasties be Diospolitan, which I believe answers to Theban? Had Manetho said, and perhaps he did mean it, Hieropolitans, I could have understood him, for it appears to me that Joseph's Pharaohs were residing at On or Hieropolis, where he lived, and they are of the twelfth dynasty, whilst the thirteenth is one of the *dreadful* five Hyksôs dynasties. Does not this either prove there were no Hyksôs, or that the Hyksôs were the Hebrews? If the eleventh, twelfth, and thirteenth dynasties are all Diospolitan, as Manetho says, how can one be Hyksôs and not the others?

Manetho, after Africanus, makes the fifteenth, sixteeth, and seventeenth dynasties shepherds, after Eusebius, only the seventeenth, Eratosthenes makes all his kings *Theban*; whilst Lepsius and Bunsen make the fifteenth and sixteenth Hyksôs or shepherds, and Osburn gives only one, with a qualification, viz., the sixteenth, 'so called Memphite shepherds.'

How can this difference be explained? Abraham

came into Egypt, as we shall see, in the twelfth century or dynasty, and Joseph in the fourteenth century or dynasty.

Manetho says, thirty dynasties expired about one hundred years before B.C. 280; but historians make thirty-one dynasties, and the last native king to have died about B.C. 340. Manetho says all the dynasties comprised 3,555 years; from this deduct 511 for the Hyksôs, and say thirty for the uncompleted thirty-first dynasty, we have 3,014 years to add to 370, making B.C. 3384 for the date of Menes.

It has, I believe, become a received opinion, there must have been some astronomical reason which was influencing the builders of the Pyramids of Gizeh, in making the entrance passages, *great rock telescopes*, which they virtually are, all pointing to the *polar star*, or some other celestial sign near it. Professor Smyth gives the angle of the entrance passage of the Great Pyramid (vol. iii. p. 38) about 26° 3′, but on p. 144, he gives details of careful observations, and the mean, as 27° 27′. I suppose, therefore, the 26° 3′ is not to be taken as his *own*, but as what is generally supposed. He gives the mean of three observations of the second Pyramid entrance passage (p. 275), as 26° 30′. Colonel Vyse (in his second volume, p. 106), gives Great, 26° 41′; Second, 25° 55′; third, 26° 8′. The difference between the Colonel and the Professor, in the observations at the two pyramids, which the Professor noted, are exactly the same, showing the greater exactitude on the part of the astronomer over the soldier; and we may therefore assume them to be more exact, and correct the Colonel's third Pyramid observation by a like

amount, and make it 26° 35′. We have, then, Great, 27° 27′; Second, 26° 30′; Third, 26° 35′. Here is a difference of less than half a degree, and shows distinctly there was evident design; that design could only be an astronomical observation. Sir John Herschel and Professor Smyth are both agreed there was no *polar star* to be seen about B.C. 2200, but *α Draconis*, which would be nearest the pole in about B.C. 2170. See Colonel Vyse's 'Pyramids' (vol. ii. p. 107), and Professor Smyth (vol. iii. book ii. sect. 5, p. 215, and following). At p. 261 he says,* 'Thus there is every probability that α Draconis, as a particular star, was really made important use of, and much looked to by the men of the Pyramid; and the only ultimate failure in the theoretical scheme is the uncertainty as to which of the *two* occasions of that star being 3° 42′ from the pole, viz., before or after, was *the* occasion intended to be typified. If the latter one was meant, the date must not be far from B.C. 2200, and if the former, B.C. 3400, nearly; but nothing monumental in the scientific way has ever yet, so far as we are aware, been brought up to shed the smallest light on the difficulty.' Any one who reads the Professor's work will see that the nearest year to the above date, B.C. 2200, when he calculated that α Draconis will be in the required position, is B.C. 2170. Therefore the pyramidal passages were constructed to meet the return of this star, *expected then*, known by a *previous* observation, or were made subsequently by an observation made in B.C. 2170. As the star revolves in 1,200 years, this would not happen till B.C. 970. I

* Smyth.

fancy it is not likely that the Egyptians would have been at the trouble of building the Pyramids for the benefit of their fortieth generation of descendants. But it is possible that a generation only one, two, or three, after the Deluge, if they had the necessary *data*, and a tradition of the return of some *star* expected about their time, which star would promise blessing to all the world, might do so. That there was a tradition of a *sign* or *star* to be expected, we know from the visit of the Magi to Palestine at our Saviour's birth. It appears to me, therefore, that the calculations or observations on which the pyramidal passages were constructed, or rather excavated (for they are all in rock), were handed down by Noah and his sons, having been taken from some sign in the heavens (see Gen. i. 14), previous to or about the time the ark was ordered to be built, or during the building. Very likely it was not a fixed sign, but appeared and disappeared in those mysterious ways that heavenly meteors did about the time of our Saviour's birth and sojourn upon earth. The observers, perhaps, took α Draconis, though not of above the third magnitude, possibly because it was the most prominent star near where this great meteor was at times to be seen.*

It will at once be said, you made Shem build the Great Pyramid, and live 500 years after the Deluge. What will you do with the other 700 years you have to account for? Archbishop Usher appropriates twenty years to the first twelve verses of Gen. iv. I do not know on what grounds, but I think it is too short; perhaps it is an error in the comprehension of

* Some astronomers consider α Draconis to vary very much in brilliancy.

the third verse; but I believe some commentators understand that verse to mean, that in 120 years mankind should be destroyed; whilst a time of opportunity to repent was allowed, during which Noah was a preacher 'of righteousness' for twenty years; after which, a period of 100 years was allotted to the construction of the ark. But it is not until the next paragraph that the Almighty speaks of the destruction of man, and all things created; and subsequently, the ark was ordered. I think, therefore, the 'real meaning' is that the age of man shall be reduced to a maximum of 120 years; and we know it was reduced gradually to that span in the time of Moses. I prefer to allow to these twelve verses the space of *two centuries*; 200 years to the antediluvians were not more than twenty years to us, say about one-fourth of a long life. It is not to be supposed that all antediluvians lived to the age of those who are named in the Bible. Habakkuk, in his first two chapters—it is thought he wrote or preached about seventy years before the destruction of Jerusalem (see Smith's 'Bible Dictionary),'—foretells the destruction of the city, and the Captivity. If the Almighty was so 'slow to anger' in this case, why should He be so 'quick to wrath' with the antediluvians? Besides, we know the Almighty 'is patient and long-suffering;' now, if He was to declare to us, He would destroy the world if we did not repent, and was to appoint a missionary to go and preach His word—for Noah could not preach after the ark was begun—the building of the ark was proof to those who *saw it*, that Noah had faith in what he preached. But how many there were who never saw it! With

all our means of communication, what would twenty years avail for a missionary to go all over the world and preach repentance! I fear some people have never considered how populous the antediluvian world may have been.

Let us stop one moment and consider that point; the Hebrew text makes 1,656 years elapse, from the creation of Adam, i.e. Adam and Eve, or mankind, not man only, to the date of the Deluge; if population had increased, doubling every *fifty* years, or *thirty-three* times, it will be found, on the common rule of simple multiplication, to amount to more than the supposed population of the world now. We are told, however, that the earth was full of violence; wars, and murders, and various means of destruction to life, are to be considered as implied under these terms. We speak of a people being *decimated*, but to what degree must the population of our present world have been decimated since the Deluge, to amount to no more than 1,200,000,000, at present?

However, it is not my desire to write a sermon or religious treatise; but in critisising Manetho, I must constantly refer to the Bible, and quote from it, in corroboration of the position I take up. I suppose it will not be denied that the book of Genesis, even '*quantum valeat*,' is a good deal more ancient than any shred of Manetho. Having thus taken 200 years for the first link in my chain, I take 117 years for my second, as the time between when the ark was ordered and the commencement of the Deluge. Usher gives 100 years, and the Bible seems to imply as much. The reason why I fix on 117 is because the Bible says the Deluge began the seventeenth day of the second

month, which I take to mean the seventeenth year of the second century. Are '*month*' and '*day*' in the original Hebrew? And so let that pass, as it were under protest.

We now come to the Deluge. I believe the days of the Deluge are years. I will go into my reasons presently at length. Noah appears to have been in the ark 371 days; if it was a 360 day year, or 376 days if it was our year, this is counting the day of entry, the seventeenth, and the day of exit, the twenty-seventh. But does the Hebrew word mean a period of twenty-four hours? Before giving my reasons for taking what to very many persons will seem a most extreme or extraordinary view of the Deluge, I will digress a little, and compare the result of what I propose with what the LXX *did*. The LXX, finding things very confused, and some evidence (we know not what), of a very ancient era (let us call it the Era of Menes), and not knowing how to fill up the space, elongated the generations in Gen. xi. and equalised them to the antediluvian generations by 650 years; they thus made Abraham born 942 years after the Flood.

	B.C.
Abraham born	2289
After the Flood	942
Flood	1
Ark building	100
Noah preaching	20
	3352
Add difference in time of ark building	17
	3369

With me:—

	B.C.
Abraham born	2289
After Flood (allowing 100 years for Arphaxad)	392
Flood	371
Ark constructing	117
Noah preaching	200
	3369

If the extra seventeen years of construction I assume are not allowed, my E.M. falls to 3,353 B.C.

Manetho says his dynasties occupied 3,555 years; the three *fives* look very much like a copyist's error.

Assuming 3,500 and no Hyksôs, we have 3,000, and thirty dynasties. Probably he considered the dynasties to expire with Ochus, who was the last native king, and according to Lemprière died in B.C. 350. This would put the era Menes in 3,350 B.C. I think we may safely put it within twenty years of that date.

It is perfectly evident that the great question here is the duration of the Deluge, not the advent of the Messiah. I take, I well know, an entirely new view of the duration of this catastrophe; there are many who do not even consider it was universal; even those who do think it was Cosmic, will probably hardly at once be induced to swallow my dictum: it was 371 years, instead of 371 or 376 days, as they have before looked upon it.

The question is this: Was the Deluge universal, and if so, how could Noah and the creatures in the ark survive for 371 years?

Not long since, I was of opinion that the Deluge was not universal. But I have quite changed my views. First, it requires too great a change in the expressions of the Bible; I am well aware how easy it is to suppose the Deluge partial, when not carefully examined. But the population must have been millions, and probably not so much herded together as we are, for the purpose of manufacture; if a nomadic or pastoral people, they must have occupied a large extent of ground, how large no one can say. I am well aware I lay myself open to severe criticism in saying so; but I do not believe they

could have occupied a less space than all Europe between Russia and the Atlantic Ocean, leaving out all south of the Danube, the Alps, and the Pyrennees. Now, can anyone suppose such a tract of country, buried at least twenty-two feet six inches above the highest hills, perhaps more, to say nothing of mountains, and the water standing up like a wall all round? How is the law of hydrostatics, 'that water will find its level,' to be got over?* The account of the Deluge does not read as if it was miraculous, but a simple course, or operation of nature. By miraculous, I mean it is not described as miracles, or events recorded in Scripture which we so call are—there is no appearance of the direct intervention of the Deity.

If the Deluge was not universal, why was Noah told distinctly to take in birds and creeping things? Surely it could not have been merely to give him trouble. Let us remember *if* the Deluge was partial, flying and creeping things could easily find places of refuge, even if other animals could not.

Here let me say, I must request my readers to believe me when I say, I only desire to explain the Bible by the light of science, but not to twist it into my own theories; on the contrary, if one must yield, man's teaching must give way. It will be all made clear some day, and I shall be well satisfied if I have in any way aided that desired end.

I am at 'swords' points' with the οἱ πολλοὶ of Bunsens, Colensos, and such men—those who write articles like the notices in Smith's 'Bible Dictionary,' on

* A careful perusal of Gen. vii. 19, 20, will prove there were no hills above 15 *cubits high.*

'Noah' and 'the Salt Sea;' it is our duty to read, read, read, until we do comprehend the Bible clearly. 'He who believeth shall not make haste.' But in my remarks I *must* be allowed to use the only means I have of explanation, viz., the human language, and to make use of familiar expressions and similies for that purpose. In doing this, I hope I shall not be accused of treating the subjects I discuss in a light or vain way, or impious or irreverent, though I shall not be surprised if at first glance some persons, very jealous for the glory and honour of God, may be disposed to think I am approaching that vein.

Let us remember, the account we have in Genesis is the only account we have of this event before, during, and after. All heathen tales relate to the subsequent time.

As regards different animals being found in some countries peculiar to those parts, we know not what subsidences have gone on in the Pacific; but we do know that all parts of the world are liable to elevation and depression; we do know also that varieties in climate and food have a material influence on animals. There are some friends of mine, for whom I have a very sincere respect and regard, who will not hear of the change I propose in Gen. xi. 10, 11, yet maintain the Deluge was local, that 'whole' means only a part, and 'all' and 'every' a portion. Then, again, there are others who maintain it could not be as described, because the increased weight of such a body of water as would cover the highest of our mountains twenty-two and a half feet would cause a serious disturbance even among the planets. This presupposes that Noah could observe, and would have recorded, such disturb-

ance, or that traces of such a disturbance could now be observed. In reply, I would ask, Are we certain the antediluvian world had the same uneven surface that our earth at present exhibits? The narrative in Gen. i. of the creation, represents the world as covered with water, a part drawn off above, and the residue separated from the 'dry' [earth], possibly by a volcanic action, or *scum* rising on the settling mass of matter, which did not very much change the general level of the surface. But the narrative of the Deluge speaks of rain from heaven; and in Gen. ii. 6 we are told that the earth was watered by a mist; which looks as if there was no rain before that of the Deluge—a theory confirmed by the recorded fact that the rainbow was not known to man till after Noah left the ark. If it had rained before, the rainbow would have been a familiar object, and would not serve as a seal to the covenant made then with Noah.

But the 'fountains of the great deep' are also described as breaking forth: the term used in the Koran is 'oven.'

Lyell is pleased to say, an 'old woman's' oven. Why a man like Sir. C. Lyell should do this, I am utterly unable to comprehend; it looks as if his mind was of a 'womanish' nature, though, when he wrote his 'Principles of Geology,' he was hardly antiquated enough to have been called an 'old woman.' He himself, in the above book, refers to extinct volcanic cones in Germany, called 'ovens.' Does not this imply volcanic eruptions, which we know are at times accompanied by water, and also by mud? I do not pretend to be a geologist, and may be writing a great deal of nonsense, but from what little I have read, it seems to me, all over the earth many extinct volcanoes exist, which

have been at some time in active operation. There is no part of the world not liable to the shock of earthquakes, more or less violent, and I cannot but think, if all the active and extinct volcanoes which are known burst out together, we should burn up.

Can any one count the volcanoes which exist below the level of the ocean?

I look upon it, the antediluvian world was as it were (perhaps ours also) an immense steam boiler, which burst, throwing some parts up, causing others to sink, and some to retain their level; the elevating power still goes on: and also at times we hear of the subsidence of tracts of land. No doubt a quiet elevation and occasional depression is going on more or less all the world over.

Violent earthquakes are often accompanied by a rush and withdrawal of the sea; this would account for many of those extraordinary scourings of the land which have been observed, as well as of icebergs having travelled along the land. Whenever I have suggested my Deluge theory to any of my friends, I have invariably been ridiculed; but my friends, in going away, have invariably remarked, 'It would get over a lot of geological difficulties.'

As regards the time, I will remark, we know the old Egyptians had two sorts of years—our common year of days, and a year of years, that is, a year of 360 years. Now, if Moses was the author of Genesis, or merely compiled it from other narratives, he was well acquainted with both these years, and, writing for an ignorant and illiterate people, he did not try their powers of belief needlessly. In Smith's 'Bible Diction-

ary' (article *Joseph*), there is a note which says, the original words in Gen. xli. 1, which we translate 'two full years,' mean 'two years of days.'

If Cheops or Shem is the author of the narrative from which the first ten chapters of Genesis were compiled, we can easily suppose, in that early stage of our present world, he might be a little confused in his terms. The Hebrew, as I have said, does not specify *days*, but periods. But then it will be said, What has become of all the water? It has been absorbed into our present rain clouds; it could not return into the earth; thereby causing a disturbance amongst some of our stars, such as Dr. Pye Smith says would have happened by the weight of the earth being increased. I suppose there is no doubt, if *increasing* the weight would cause a disturbance, *reducing* the weight would do so likewise, though not perhaps to the same extent. Thus, too, we have the rainbow accounted for by the forming of the rain clouds above us, which did not exist before; there were clouds, no doubt, but only enough, with the variations of the temperature of the atmosphere, to cause the mist spoken of in Gen. ii. 6. The words in Gen. ii. 5 are, 'For the Lord God had not caused it to rain upon the earth;' if we change the position of 'not,' and make it, 'For the Lord God had caused it *not* to rain upon the earth,' it will, in my opinion, accord better with the words of the sixth verse, 'But there went up a mist from the earth, and watered the whole face of the ground.' But how about the change of weight I have referred to? That I will notice presently, and attempt to account for its operation, of which I fully believe traces can even now

be discovered; but at present I desire to draw attention to what may be said to have passed almost under our own observation, viz. the cyclone at St. Thomas, October 29, 1867, and the earthquake of the following month.

I will confine myself to inserting the two following extracts, taken from the London *Times* of December 18, 1867. I might very easily extend them by extracts from the same paper of the 19th and 20th, but they pretty well embody my idea of what happened at the Deluge, only on a smaller scale. I beg to draw attention to the wave being caused by a submarine volcano. Does not this coincide with the expression of the 'fountains of the deep,' and oven?

The St. Thomas' Acting-Consul reports, under date Saturday afternoon, November 30:—

'The last mail conveyed particulars of a terrific hurricane which had devastated our island on the 29th ult. I have now to advise a more sad calamity, which has no parallel in the annals of St. Thomas. On the afternoon of the 18th inst., about 3 P.M., a very severe earthquake was experienced here, followed in about five minutes by another shock, not quite so violent in strength and duration, but which, combined, destroyed a number of houses and cracked nearly every building in the business part of the town. Many are so badly damaged as to render them unsafe, and already the Government have ordered several to be pulled down. Shortly after the earthquakes a fearful sea wave rolled in upon us, appearing suddenly from the ocean like a wall, and at one moment it was feared that the island would be swept. Fortunately, the sea broke upon the outer bays of the island, and when it came into the

harbour only the lower part of the town was under water, flooding the stores, which are built near the shore, and doing considerable damage: many had from four to five feet of water in them, and our main street, filled with water, had the appearance of a canal, with boats and other articles floating in it. Several people were drowned, and the shipping in the port sustained some damage. The sea rose over fourteen feet perpendicularly above its usual level, and alarmed every one.

'The Liverpool and West India Company's wharf, a costly iron structure, which weathered the hurricane, was totally demolished.

'*It is supposed that the sea wave was caused by a submarine eruption, about two miles outside of the harbour.* From the 18th inst. to the present moment there have been at intervals a succession of severe earthquake shocks—from twenty to thirty daily; but they are gradually becoming fewer and less violent, which makes me hope they will soon cease. The oscillations have been and are from south to north. The bulk of the inhabitants deserted their houses, and for safety fled to the hills, living under tents for several days. I hope that confidence may soon be restored, as every one has been unnerved, and business has been entirely suspended. With even the shocks in the last twenty-four hours the buildings rock to and fro, endangering life. The destruction to property here has been awful, and the scene we have passed through can never be forgotten.

'The disaster has not been confined to this island, having extended in a lesser degree to Porto Rico, Vieque, St. Croix, Tortola, and other adjacent islands. The misfortunes have been so great that many merchants

have resolved on liquidating, and leaving for a more favoured place.

'The *La Plata* had a narrow escape. She was lying at Water Island, three miles from St. Thomas, when, at 2.45 A.M. of the 18th of November, a severe shock of an earthquake took place. Captain Revett states that the shock had not long subsided when the water began to recede from the shores and bays, and returned in about ten minutes in an enormous sea, over twenty feet in height, which with resistless fury threatened to overwhelm the ship. Fortunately, where she was lying the sea was broken by the Porpoise rocks before it reached her, but it stove in her starboard bulwarks, carried away her boats, davits, and coal hulks from alongside, and caused the ship to swing round several times. After the earthquake a strong sulphurous smell pervaded the ship. Cries of "Fire," and "The ship is smoking," were raised by the terror-stricken negroes on board, coaling. Some of them succeeded in the attempt to lower a boat, and attempted to escape in it to shore, but the boat was stove in and all in her drowned. The passengers were landed for safety at Water Island and sent round to St. Thomas, where the *La Plata* subsequently had to proceed for repairs and to coal. The negroes there struck work, and the crew of the *La Plata* had to coal her.

'A complimentary address has since been presented to Captain Revett by the passengers, for his conduct and that of his crew under the trying circumstances they were placed in.'

'On the 18th of November St. Thomas and the surrounding islands were visited by severe shocks of earthquake, causing the destruction of an immense

amount of property. The loss of life, fortunately, was comparatively small. The first shock was followed by an enormous wave, which, rolling in from seaward, completely submerged for the time all the lower parts of the town, flooding most of the merchants' stores and damaging the goods. At Bass-end, Santa Cruz, the force of the wave was so great that the American ship of war *Monongahela* was driven up and landed in the market-place. Most of the houses were destroyed by the combined effects of the earthquake and wave. Rhode-town (Tortola) also suffered severely, and scarcely a house was left standing; the inhabitants having to take to the hills to escape being washed away by the sea. At St. Thomas the shocks continued to be felt up to the time of *La Plata's* leaving, and on the 1st inst., at from 0.20 P.M. to 1 P.M. three were felt, one being almost as severe as the first one of the 18th ult. The inhabitants have therefore been kept in a constant state of alarm during the whole time: hundreds are living in tents on the hills, and most of the residences built of stone are deserted. Many of the stores are so shaken and split as to be quite unsafe even to enter, so that business is at a standstill.'

In describing the earthquake of the 18th of November the *St. Thomas Times* of the 23rd of November states:—

'Scarcely had we completed our painful account of the lamentable hurricane of the 29th of October, in our issues of the 13th and 16th inst., the delay, as our readers are aware, being caused by the destruction of the 'Tidende' office, and its subsequent arrangement, than it becomes our most distressing duty again to

record an amount of calamity that has no parallel in the annals of St. Thomas. On Monday afternoon, the 18th of November, at about 10 minutes after 3 o'clock, this island was visited by the severest earthquake that it has ever at any previous time been its misfortune to experience. Like all the islands situated in the tropics, St. Thomas has been accustomed to feel occasional shocks of earthquakes of more or less force, the severest until now on record being that felt on the 19th of February, 1842, the counterpart of the one that proved so devastating to Guadaloupe. It is generally conceded that what was felt and experienced here on the day above alluded to cannot well be described, and if we succeed in giving a faint outline of what occurred we shall have succeeded better in our task than the distress of the moment justifies us to expect. The loud rumbling of the earth, and the severity of the shocks (as it is allowed that there were many in a brief space), soon emptied every store and building of its occupants, and it appeared that no edifice could withstand the test of another moment's shaking. And the alarm was not without ample cause; for as each individual rushed into the streets it was only to witness the tottering of his neighbour's walls, or to see the falling of bricks or mortar from his own. To compute the time that this severe peril lasted would be impossible, as every second had the space of an hour in every one's mind. The streets, or rather we speak of the principal street, soon proved too insecure for those who were in it, as every instant seemed to indicate that some building or other would fall therein, and, consequently, every one able ran with all his might for the sea-shore. With the termination

of this run, the shocks appeared also to subside, and on returning to the main street every observer was able to form an idea of the destruction that had taken place in so very little time. We shall not attempt to state, with the limited time we have to do it in, the buildings that have suffered, or rather that have suffered most, since we believe that none are exempt. The principal destruction is, of course, confined to the main street, as that is entirely built of wood; and as it constitutes the business part of the town, the losses in buildings and merchandise, it is easy to see, will be fearfully large. No householder, merchant, or storekeeper but what will have to count his losses by the tens and not by units. We had almost forgotten the earthquake in our attempt to describe its ravages on buildings and places of business, and the fear it engendered on every individual mind. But the worst account has to come; and in order to assist us in its description, we must begin by stating that the rumbling and the shocks evidently came from the south-west, and, if it may be allowed us to say, seemed to pass under our feet and proceed on in a north-easterly course. What subsequently happened gives strength to this belief. No sooner had the first terrific shock ceased, and the mind permitted to resume a part of its calm, than a spectacle presented itself that will never be obliterated from the memory of those whose misfortune it was to see it. As we have said, no sooner had the shock ceased than an ocean of water (the height no one will undertake to compute), and forming one wave, was seen at the south-west, beyond our harbour, majestically yet steadily rolling onward towards us. No army in high day review ever

moved with more precision, or, in battle array, ever advanced with more self-possession upon the adversary than this ocean of water moved upon us. Had it been that it was only our privilege to see, no one would have declined the opportunity. Imagine as bright a sun as ever shone out upon our planet, with no breath of air from out the heavens, our harbour as dull as the Dead Sea, and an advancing ocean or wave just before us, foretelling in its every movement that it must engulf or ride down all things that would encounter it. It came on; in length it must have had the span of our island; it reached our fort points, that happily received and broke its shock, otherwise an inevitable inundation of the whole town must have been our fate. That part of the wave that entered the harbour leaves a melancholy reminiscence for many, for it swept clear up into our principal streets, and no store, from the King's wharf downwards, but has had from four to five feet of water within it. The losses can therefore be easily comprehended. Sloops, schooners, and buoys may now be seen high and dry in the streets. Add to this, as we now write, that our merchants are fearful to go into their stores. Fear still occupies the minds of all our inhabitants, and numbers, without regard to position, are encamped on the hills under tents, particularly those who lived in walled * houses.

'Before concluding, we must add a few more lines to our account of the sea that came into the harbour. We said that its length must have been the span of our island; this we have a right to believe, for it not only entered at our fort points, but it passed into the Gregories from the west and east ends of Water Island,

* Probably brick or stone.

and then again into the harbour at the haulovers, so that the seashore and the streets at the western end of the town have suffered equally with those that were exposed to the wave that came in at the points. At the Gregories, where a village within the last few years had sprung up, the cottages have been carried a long way in. The receding of the waters, after they had spent themselves on the shores, was almost as threatening as their coming, and for the time looked as if the harbour and the Gregories would have remained dried up. Many people assert to have seen fish lying on the strand as the water went down. The junction of the receding water with that on the outside of the fort points, also created feelings of unpleasantness, as it really for the time looked as if a reef had formed across the mouth of the harbour, which would have been the inevitable ruin of the place. The United States' war steamer *De Soto*, which was in the harbour, immediately proceeded to its mouth, in the hope of saving the lives of those that were on board the vessels that capsized in that vicinity, and we believe was partly successful.'

Cyclones are frequently accompanied or followed by earthquakes; the cyclone of 1864, in Calcutta, was accompanied by one; in St. Thomas, in 1867, we have one following at an interval of twenty days.

Let us suppose the earth deluged by incessant rain, not absolutely continuous but an unbroken spell of rainy weather, such as for twenty-six days in 1842 was known in Bengal, during which time the sun was not seen in Calcutta. I have heard from a native of Boston, United States of America, he remembers the same to

have happened there when he was a lad, between 1825 and 1828, for six weeks. For forty years accompanied with cyclones and earthquakes, or succeeded by them, we arrive at the end of the first period of forty days, in the narrative of the Deluge.* Every forest would be laid low and deeply imbedded by the gravel, sand, clay, mud, and earth of various kinds washed about whilst the waters 'prevailed,' ruled, run riot, or had dominion over the earth. The waters thus ruled for 150 days or years, during which time, as the margin, chap. viii. verse 3, says, 'And the waters returned from off the earth in going and returning;' then, fifth verse: 'And the waters were in going and decreasing until the tenth month; in the tenth (month), on the first (day) of the month, were the tops of the mountains seen'—implying continued action of the waters for 255 days or years. But the ark had *rested* on Ararat seventy-three days, or years, before the mountains were seen; probably, as the sailors say, it 'grounded,' and floated off by the action of the currents or tide, or the 'goings and returnings;' volcanic action going on, caused the mountains to appear, valleys and plains to subside, and even the water to evaporate.† In regard to the ark's resting on Mount Ararat, I cannot suppose it remained there; it was at least forty feet deep, and the animals could not have descended from it. Ararat, too, is 10,000 feet high; but I say *our* Ararat, *as it is*, did not *then* exist. Noah, though a very good mechanic,

* Perhaps the volcanic eruptions did not break out till *after* the forty days, when the surface was all *mud*.

† If I suggest the words 'the tops of the mountains were seen,' implies their first appearance, their being *born*,—'before the mountains were brought forth,'—shall I be charged with straining the text?

probably, had not the conveniences we have for lifting elephants and other animals in and out of ships; it is much more likely that the ark was guided by the Almighty directing the currents into some haven where all could come out without much difficulty. In fact, as I have said before, the whole story is as if nothing very extraordinary had happened. We know nothing of the state of life in the antediluvian times, to speak of, but we can be sure they were good mechanics, to a certain extent.

But Noah remains quiet forty days or years, and then sends out the raven and dove; the latter returns, because, being a bird of different habits to the raven, she can *rest* or sleep only on trees, that is, a perch, and she returned because she 'found no rest for the sole of her foot;' or in other words, there was no tree left or existing within her flight, where she could light and rest, as a dove can rest on a leafless branch; *no tree was in existence.* Seven days after, she is sent out again, and brings home an olive leaf. Will any one pretend to say an olive tree could have sprung up in seven days, so that the dove could bring in a leaf from it? No, certainly not; it might happen in seven years, but not in seven days. This struck me, and from this has arisen my extraordinary diluvian theory, or 'cosa.' I believe an author better known to fame than myself, had his 'cosa' about the olive tree, which was, that it would live a very long time under water. I am not aware, however, that he ever tried if it would live 300 days, at a depth of over 10,000 feet below water. It seems to me, he does not solve the difficulty.

After the ark was ready, the Lord said in *seven days*

He would bring on the Deluge; Noah seems to have had this time to collect the animals, and ship both them and their food; could this, without miraculous aid, be done in a week? We are not told of such aid. Here, at each end of the Deluge, we have events alluded to which could not have happened in the time, as we usually understand it.

What is the inference?

Doubtless, if the Almighty chose, He could make the olive tree to grow in seven seconds; but He does not appear to have done so.

Why did Noah wait ten days after the dove disappeared? To allow the earth to bring forth fruit and provisions for those in the ark. Would this happen in ten or even twenty days? Let us consider one moment. Could Noah have known how to preserve meat and other food, so that it would be good and wholesome food after 360 days?

Unless the Almighty in a miraculous way not only preserved it and the health of all in the ark, as well as increased it, as He did the handful of meal and little oil, they would have died of disease and starvation, even in twelve months. But what do those peculiar words in Gen. vii. 16, 'And the Lord shut him in,' imply? They do not apply to the door and window, for Noah opened the last himself, and appears to have come out as he was directed, having first taken off the roof. They mean, 'The Lord put Noah, and all in the ark, into a state of *hybernation.*' The window was, no doubt, a lattice, such as now are common in the East for ventilation.

Yes, no doubt it is very absurd; just like all Egypt-

ologists—got some absurd theory. I say, 'Strike, *but* hear.' Is it so absurd? All parts of nature, or creation, are liable more or less to hybernation—water, earth, trees, animals, birds, reptiles, insects; why should man not be subject to it, if his Maker pleases?

The difficulties of the Deluge are very great. But are we to suppose they are not to be explained in a reasonable way? It will be said this is unreasonable: that I deny; when it is a law all nature is more or less subject to, except man, I say man may be made subject to it, if necessary. What is catelepsy, coma, stupor, arising from a violent blow on the head, without injury to the brain, or those rare but known cases of persons laid out, and watched as dead, ay, even placed in the very coffin, again rising up and appearing in the world?

To me, it magnifies the Almighty. I cannot see any way so easy of solving the difficulties of the Deluge. I believe the Deluge did happen, whether Noah was 371 days or 371 years in the ark; even for the shorter period, could the large quadrupeds and birds, without a miracle, preserve their health? The ark was not a zoological garden, where they could take more or less exercise, but more like the 'Black Hole of Calcutta,' and animal life must have succumbed before the mephitic gas of the ark, unless the Almighty cast the inmates into a deep sleep.

Let me here ask if cases have not been known of suspended sensation, while consciousness yet remained? What is mesmerism? What is somnambulism?

We must remember Nature's laws know no variation;

each class in nature is subject to the same laws: though some of each class hybernate, all do not. Snakes hybernate in Egypt, at least some do; but all reptiles do not. I had a tortoise in my garden near Calcutta, which regularly hybernated. This shows hybernation does not proceed from cold alone. Man does not hybernate, because he has faculties which enable him to provide against winter wants, and can exist on stored-up food.

It seems to me there are other things to be learnt from the Bible as well as religion: thus, 'Gather up the fragments, that nothing be lost.' It would be well for us if we all knew this by *heart*. Then again, there are many texts which I cannot but think have direct geological teaching implied in them; see Job ix. 5: 'Which removeth the mountains and they know not; which overturneth them in His anger.' Again, xxviii. 9, 10: 'He overturneth the mountains by their roots, He cutteth out rivers among the rocks.' Also, Deut. xxxii. 22: 'Shall consume the earth with her increase, and shall set on fire the foundations of the mountains.' Many similar texts might be pointed out; but very likely I shall be said to be straining texts, or that Science has nothing to do with the Bible. I think it is to be regretted she has not, as perhaps then some of the folly written in her name would never have been written. As regards the question, whether the Deluge was local or not, I will allude to what has been published within three months of each other in the London *Times*, in 1867 First, there was an account of the discovery at Hull, in England (the date of publication I did not take down), of a submerged forest, the trees

bedded in peat; the trees fell *in situ.* They are of the same kind as grow in the same locality at present, showing the climate was not materially warmer or colder; quantities of nuts were found, showing that they fell late in the autumn. If this is an antediluvian forest sunk by the Deluge, it would seem to prove that the antediluvian year began about the Autumual Equinox, and the 'seventeenth day of the second month' shows it as well, perhaps, as the time of building the ark, as I have applied it to.

There have been also a flint knife and remains of a fire found among the trees, showing the country was inhabited when the trees were growing. Some one will say, These are pre-Adamite signs. I beg to say there never were any such beings as pre-Adamites. Now, there has been no change of level in this part of England, of such an extent as to attract notice, during the last 1,000 years. How, then, are these *facts* to be explained?

My diluvian theory will explain them very clearly and simply.

Again, in the *Times* of December 18, 1867, I find the following: 'Some months ago, a stone hatchet was discovered some eight or nine feet deep, in the undisturbed oolitic gravel beds of Malton (Yorkshire). The hatchet was smooth, and quite unlike the gravel implements of other parts of England, and by some the discovery has been regarded as doubtful, the idea being, the hatchet had fallen in from the top. The hatchet, however, is incrusted with lime, which would not have resulted from the surface soil. On Friday last, another discovery was made in the same beds, but about half a

mile from the place where the hatchet was found. This was part of the leg-bone of an ox (quite fossilised), split lengthwise to extract the marrow, precisely as in the cases of the animal bones found in tumuli. This was four feet six inches from the surface, and two feet below the clean gravel, which showed several unbroken layers.'

What can this be, if not antediluvian? Then, are any of the Yorkshire tumuli antediluvian? is it possible? also the mounds in the United States of America, in Ohio, and other of the Western States, which have thitherto been without any explanation? Are these remains of the old form of our world? It has often been remarked, it was very curious none had been ever found. But again, in December 26, 1867, in the same London paper, the *Times*, I find, under the head of 'Coaling in the Pacific,' extracted from the *New Zealand Times*, an account written by a passenger from Panama, of the coaling station at the island of Opara or Rapa, in which, describing the island eight miles long by six in its widest parts, after saying, 'The natives are a simple harmless race, about 200 in number,' he goes on, 'Upon the summits of the highest peaks are the extensive remains of native fortifications, constructed of hewn stone, well squared and smoothed. Some of these stones are two tons in weight, and a cement has been used to unite them of great tenacity and hardness. The natives say these were erected *many moons* ago, when the natives were very numerous and made war upon each other.'

If these are not antediluvian, what are they? There are Yorkshire in England, and the island of

Opara in the Pacific, testifying, as it were the same day; the two statements of the split bone at Malton, and those mysterious buildings in the Pacific, are published in the London *Times*, only *eight* days apart. I hope the 'many moons' of the natives will be observed; it reminds me of the indefinite use in Genesis, of year and day, both original describers being uneducated people.

It reminds me also of our Saviour's saying, that if the people did not shout, 'Blessed be the King who cometh in the name of the Lord, the stones would immediately cry out.'

Lastly, we have the celebrated bone found in the drift in France, eight or ten years ago, about which there has been so much written. I do not remember the locality. I have no doubt it was an antediluvian remain.

The reason why we find so very few remains of antediluvian men and beasts, is because of the law, 'Dust thou art, and unto dust shalt thou return.' Beasts and man alike being created from the earth, I fancy no one will pretend to say that animal bone can exist for 4,000 years or more, unless impregnated with some mineral substance. I believe it is an acknowledged fact that Egyptian mummies of a less age fall to dust on being unwrapped.

Here we have the Pacific, North America, France, and England all bearing witness to the universality of the Deluge, inasmuch as they prove the population were scattered over a very large expanse.

And now I will go to the stellary disturbance, caused by the removal of the water, making the earth

lighter. In vol. iii. p. 276, Professor Smyth says, 'For though there was no particular *absolute* change among known stars about the epoch of the Deluge, yet, viewing them according to the peculiar and very accurate principles of Great Pyramid observation, there was a pyramidal *relative* alteration just then, of the whole sidereal heavens, and with the effect of even making the most positive antithesis between the normal constellations, for chronological purposes, of antediluvian on one side, and postdiluvian times on the other. Compute, for example, for the date B.C. 3400, or any other certainly antediluvian time, what were the equatorial and zodiacal constellations on the meridian above, when α Draconis was on the meridian, below the pole, and you will find them to be, *Serpens*, *Ophiuchus*, and *Scorpio*. But as the year B.C. 2800 came on, a rapid displacement of those constellations began to be effected, amounting almost to a rushing round of the whole heavens (dependent on the exaggerated effects of precession on α Draconis, then quite close to the pole of rotation of the sky), and when, towards B.C. 2200, the extreme rapidity of that change had passed, and the dangers of the Deluge also, according to the traditional chronology of every nation; then, if you compute what constellation was above, when α Draconis was below the pole, and in the direction of the entrance passage of the pyramid, you will find that all the former mentioned zodiacal stars are entirely departed from the visible hemisphere, leaving Taurus dominant in their place, and the Pleiades exactly on the meridian. Hence, too, a chronological method for a stellar year, that formerly began in spring, would be

changed almost suddenly into an autumn observation, explaining further traditions.'

I suppose one may put confidence in such remarks, put forth by the Royal Astronomer for Scotland. I may draw a wrong inference from them, but that is my fault, not his. It seems to me, we may infer that this disturbance existed over *years*, from before B.C. 2800; subsequently, and further, there was some very decided change in the seasons. Now, if I am right in asserting that a reduction of the weight of the earth would affect the stars as well, if not to the same extent as an increase, we have a reduction in its weight caused by the removal of the water, to form our present rain-clouds, and we have the disturbance caused thereby extending over a long series of years.

	B.C.
According to my theory, the Deluge began . . .	3053
The waters prevailed for years	150
Bringing us into the year when absorption would commence .	2903

Professor Smyth does not say this disturbance began in B.C. 2800, but 'as the year 2800 *came on*.' Perhaps it did not begin till some time after the evaporation had begun; the ark 'rested' on the 223rd day after the Deluge began, or in B.C. 2830. Are we to assume the disturbance began then?

Supposing this great change, which I infer to have taken place in the seasons, really to have taken place, we see the necessity for Noah, and all in the ark, being in a state of hybernation.

Here I shall leave this part of the subject, only pointing out a few chronological facts which are connected with my dynasty theory.

The Era Menes corresponds with . . .		3370 B.C.
The Deluge ends		688 E.M.
Abraham born after . . .		392 years.
Jacob enters Egypt . . .		304 „
Joseph dies . .	1450 E.M.	70
Exodus . . .	1814 „	360
Temple built		525
existed		424
Captivity ends B.C. 536 . . .		70
		2833
Add date of ascension of Cyrus . .		536
		3369

I have already referred to a moral essay, by one Ptah Htp, in the fifteenth dynasty, which I said I supposed had reference to Joseph. Here we find Joseph's death did take place in the fifteenth century E.M., as well as fifteenth dynasty. Again, we find the Exodus also took place in the nineteenth century E.M. as well as the nineteenth dynasty. Manetho found the Hebrews or Hyksôs were in Egypt during the parts of two centuries, as well as four whole ones, viz. sixteen years in the fourteenth, the fifteenth, sixteenth, seventeenth, and eighteenth, and fourteen years in the nineteenth century E.M. He could not understand how it could be anything else than more than 500 years, and in consequence put them down at 511. In this instance he seems to have tried to be fair.

Manetho ought to have made the Hyksôs dynasties fourteenth to nineteenth inclusive; but as the first, and most hated of all the Hyksôs, the shepherd Philitis, or Abraham, came into Egypt in the year E.M. 1153, that is in the twelfth century, Manetho gave the thirteenth to seventeenth inclusive to the Hyksôs. Here also we find why Eratosthenes left out the fifteenth, sixteenth, seventeenth, eighteenth, and nineteenth dynasties—

five dynasties. Manetho said the Hyksôs were in Egypt five dynasties; Eratosthenes knew the Hyksôs were the Hebrews, and that they came in during the fourteenth century B.M., and left during the nineteenth; he therefore struck out all Manetho's kings of those dynasties, except for nineteen years.

Manetho says thirty Memphites reigned for 1,790 years, and ten Thinite kings for 350 years before Menes. Is there to be found any connection here with the history of man, as given in Genesis? There were, including Noah, ten antediluvian generations, and Noah lived 350 years after the Deluge. Again, the generations of Adam, (i.e. man and woman, or mankind), as given, amount to 1,656 years. No doubt man lived alone for some time—supposing for the space of a generation, or about 130 years—we have 1,786 years. Is it possible Manetho had some clue to this? We have in Genesis the names of twenty-seven persons given, antediluvans; if we add to these the wives of Noah's sons, we have the exact number of Memphite kings. Again, if we suppose each of the six days of creation to be a century (I do not include the first two verses of Genesis i.), and add 600 years to 1,656, we arrive very near, if not exactly, at the LXX antediluvian chronology.

NOTE ON EGYPTIAN CYCLES.

I imagine no one will dispute the assertion that the ancient Egyptians had several cycles for astronomical or other purposes.

We have an account of the sothic and tropical cycles of

1,460 and 1,461 years respectively, to regulate the years as we do by our bissextile system, or *cycle*, dropping a year after a long interval, as we do a day, in February.

Again we find the Phœnix cycle, when a constellation (or star), called the *Phœnix*, rose on the first of Thoth, the first month of the new year.

Tacitus (Anal. v. 28) says, the Phœnix appears every 1,461 years; that it was seen (perhaps this implies *noted or recorded*), first in the reign of Sesostris, next in that of Amasis, and thirdly in that of the third Macedonian king. If this means the second successor of Alexander, we have to go back 2,922 years, to the time of its first appearance. Tacitus says this third appearance was in B.C. 525; as Alexander's second successor was nearer B.C. 275, there is evidently here an error.

There appear to have been two kings named Amasis, or some Egyptologists place Amasis in the eighteenth and others in the twenty-sixth dynasty: this latter would not be very far from B.C. 525, the other, if he is the first king of the eighteenth dynasty, about B.C. 1800; here again there is an evident error in the report of Tacitus. Then, who was Sesostris? If Joseph's second king, we may safely put him as reigning B.C. 1985.

Between 1985 and 525 we have 1,460 years, or say one return of the Phœnix, according to the note given by Tacitus; but there should have been *two*.

Is it not probable the Phœnix was a comet (not any particular known comet), whose appearance was recorded when some great event happened at the time a comet was seen?

There was also another cycle, period, *or year*, viz., the panegyrical, by some called year, by others period, which seems to have had a year for a day. I believe it is generally calculated alternately 364½ and 366 years, but it appears as if it was for the purpose of noting or recording great events in Egyptian history, or to keep the record of byegone events in the rise of the kingdom.

Herodotus tells us (Book ii. c. 4), the calendar of the Egyptians was corrected 900 years before his time, say about B.C. 1350.

The following, I believe, are the dates given to the ten panegyrical years, according to the foregoing calculation, but it is a doubt in my mind if the calculation is correct, and whether it should not be made at 360 years each.

1.	year B.C. 3083	if we go back	3035	1.
2.	„ 2717	from A.D. 205	2675	2.
3.	„ 2352	and calculate	2315	3.
4.	„ 1986	360 years each	1955	4.
5.	„ 1622	period we have	1595	5.
6.	„ 1256	„	1235	6.
7.	„ 891	„	875	7.
8.	„ 525	„	515	8.
9.	„ 161	„	155	9.
10.	„ A.D. 205	„	205	10.

Of course, it is folly to suppose historical events can happen in cycles.

But by my chronology Noah enters the ark in	3052	against	3035—3083
He leaves it	2681	„	2675—2717
dies in	2331	„	2315—2352
Jacob enters Egypt	1985	„	1955—1986

	years
I assume the Deluge to have been . . .	371
Noah survived it	350
I make Jacob enter Egypt after death of Noah . .	346
	1067
Average of these events	356

Certainly, to say the least, these dates are very curious.

But I have already said, I believe there was a connection between the star *a* Draconis and the Era Menes, which could be traced out. I believe I may assume the star was in ascendant in B.C. 3370 and B.C. 2170. I have traced Menes back to 3369 B.C.; if we deduct from 3,370 and 3,369, 317, the number of years I have assumed between the time when the Lord said he would destroy the world, we have 3053 and 3052 for the date of the Deluge; we then arrive at the following dates:—

By Astronomy	3053
Manetho	3052
Myself	3052
Egyptian records	3083
or perhaps	3035

Assuming Manetho and myself to agree, we have four dates, and the *maximum* difference is 48, or an average of 12, on dates, say 4,900, nearly 5,000 years ago.

But I will go to other dates. Eusebius says the *division* took place in 930 of Noah's life, i.e. 330 P.D. or 2351 B.C.

In his 'Life of Confucius,' Mr. Legge says 'Yaou reigned 100 years; his reign began B.C. 2356, and after 73 years he resigned to Shun, who, however, did not ascend the throne until 2254, two years after his father's death.'

It is singular to find a record of a king reigning in China 100 years.

Eusebius makes Noah *divide* the world among his sons twenty years before he died, as Yaou resigns twenty-seven years before his death. Legge, p. 260, says 'Yaou said to Shun, The heavenly order of succession rests in your person.'

Bunsen, vol. iv. p. 20, says, the Egyptian monarchy at first was elective.

We find Yaou ascend B.C. 2356, and resign 2283 to Shun (? Shem). If Abraham entered Egypt B.C. 2214, the sixty-third year of Shem's reign, Shem's reign must date from B.C. 2277 against 2283, if Shun and Shem are the same.

Here we have a difference of six years between China and Egypt.

I very likely am not correct in placing Cyrus in B.C. 536: most persons would prefer 538. I took Usher's date; again, I took forty-five years, according to Caleb's words, for the time from Exodus to the division of the land; but as he was sent out in the second year as a spy, we have, say another one and a half year, thus reducing the difference to two and a half years, which I candidly confess I think much *too small*.

CHAPTER VIII.

DILUVIAN COSAS.

LET us see what Sir J. F. W. Herschel says. 'As a first preparation, therefore, for the course he is about to commence he' (every student who enters upon a scientific pursuit) 'must loosen his hold on all crude and hastily adopted notions, and must strengthen himself by something of an effort, and resolve for the unprejudiced admission of every conclusion which shall appear to be supported by careful observation and logical argument, even should it prove of a nature adverse to notions he may have previously formed for himself, or taken up without examination on the credit of others.' *

These remarks equally apply to the consideration of a new subject, as an old one in a new light. In this latter aspect I wish the question of the Deluge to be considered. Hitherto the time occupied by the Deluge has not been looked on as very extended; but I ask any one to consider, whether it *may not* have been so, and whether I have not pointed out expressions in Scripture which indicate that it was so? Let us bear in mind, that although the account in the Bible is very brief, it is the *only account* we have of this event. We

* Par. 1 of 'Outlines of Astronomy,' 1849.

have abundance of tradition, but no other history of this catastrophe.

However sceptical I may be as regards the deductions of Lyell and some other geologists, I so far agree with them, that there has been a 'Glacial Era' since man was formed or made. Habakkuk iii. 11, says, 'The sun and moon stood still in their habitation.' What, I ask, do these words, to which I shall often refer, imply?

If a suspension of the action of the sun, intense cold.

In Lyell's 'Principles of Geology,' fifth edition—and let me remark, in quoting Lyell I always refer to this edition (vol. iv. p. 206),—I find, 'For my own part, I have always considered the Flood, when its universality in the strictest sense of the term is insisted on, as a preternatural event, far beyond the reach of philosophical enquiry, whether as to the causes employed to produce it, or the effects most likely to result from it.' I wish I could ask the author of these remarks if he ever considered it for a moment in the way I have suggested? He goes on: 'At the same time, it is clear that they who are desirous of pointing out the coincidence of geological phenomena with the occurrence of such a general catastrophe, must neglect no one of the circumstances enumerated in the Mosaic history, least of all, so remarkable a fact as that the olive remained standing when the waters were abating.' On page 207 he again says, 'It is the opinion of some writers, that the earth's surface underwent no great modification at the era of the Mosaic deluge, and that the strictest interpretation of the Scriptural narrative does not warrant us in expecting to find any geological monu-

ment of the catastrophe.' What kind of monument he expected to find I cannot understand.

In Gen. vi. 13, we have, 'I will destroy them with the earth.' Also in Gen. ix. 11, 'Neither shall there be any more a flood to destroy the earth.' St. Peter tells us the old world 'perished.' What does this expression mean, but that it was destroyed? If destroyed, how can any monuments be found? At the same time, I believe that some remains or records which do not amount to *geological monuments* are to be found.

Do not Dr. Carpenter's 'Deep Sea Dredgings,' of 1868, teach us that the chronological deductions of geologists may be somewhat in error? As Scripture was not written to instruct us in Geology, History, Physics, or Mechanics, we cannot expect to find chapters devoted to these subjects in the sacred Record. I find the following remark, under the head of *Earth*, in Smith's 'Bible Dictionary,' vol. i. p. 462 : 'Moses viewed matter, and all forms of matter, in their relations, primarily to God, and secondarily to man. In relation to the latter, he selects his materials with the special view of illustrating the subordination of all the orders of material things to the necessities and comforts of man. With these objects in view, it ought not to be a matter of surprise if the simple narrative of creation omits much that scientific research has since supplied, and appears in a guise adapted to those objects.'

We have certain faculties given us, amongst others the powers of observation and reflection, and if we employ these powers in due submission to a belief in what the all-wise Creator has been pleased to *reveal* to us, and a humble faith that what He has revealed *is*

true, it will by degrees be made plain, but not all at once. If all at once, why was not all we know revealed to the Hebrews? and more also, what our descendants will know, which we are ignorant of? If this had been done by Moses, what would man's mind have been exercised upon the last 3,400 years?

I have already said I am no geologist. I hope, therefore, any geologist who may see these remarks will not be annoyed if I suggest he has been looking through the wrong end of the telescope, and ask him to reverse it, and try if he can see better; if I had been bred in the land of Geology, doubtless I should use the telescope as it is used there.

I believe in free England any man may publish anything, however absurd, but must not publish libel or blasphemy without fear of punishment. I hope I cannot be accused of either.

Sir C. Lyell says that he who maintains the Deluge to have been universal, must be careful, and point out how he can explain each circumstance, but in particular how the olive tree remained standing. The Bible, in Genesis, says it *was* universal, most distinctly; so does St. Peter in his second Epistle, chap. iii. verse 6. In Gen. vii. 4, the Lord says, 'I *will* destroy *every living substance*' (in the *French*, '*toute* chose qui subsiste'), not man only, trees, and in fact, everything, which He had made. Are we to suppose God did not do what He said He would? If we believe He executed this threat, there was no olive tree left standing, and on her first flight the dove found none, not even without leaves. A dove can *rest* on a tree in winter, which has lost its leaves. Therefore, the tree either grew miraculously or the seven

days spoken of were more than seven ordinary days of twenty-four hours each.

Will not the 'goings and returnings' of the waters for 150 years account for the water-worn rocks, gravel, bones, and other remains found? Will one hundred and fifty days? There they are, and some explanation is required. The waters then became more tranquil, 'were assuaged,' or calmed, but some motion continued, while perhaps the mountains were rising; it is evident from the state we find mountain sides now in, that they have been under water. It may be the mountains did not appear above the original hills until the time stated, the 223rd day of the Deluge, but that they have been forced up since, and some indeed are even now rising by volcanic action. As regards the face of the earth, no doubt a very great change has taken place; before the Deluge, there were no mountains; the earth is said to have been 'without form,' and is described as merely separated from the water, becoming a plain with low ranges of hills, out of which 'the mountains were brought forth.'

Why may not the antediluvian plain, or surface, have been over a stratum of peat floating on the lower waters? The Hebrews seem to have believed there was a vast reservoir of water in the earth. Was this belief handed down from a tradition connected with the formation of the primæval world? *

Geologists believe, or pretend to believe, that the earth has been to all intents destroyed and re-formed several times; but they do not feel disposed to allow

* The Greek poets describe the earth as a *plain*; Aristotle, Plato, Archimedes and Euclid, believed it was a sphere.

that it was destroyed by the Noachian Deluge, although Scripture distinctly declares it was so. Time is nothing to the Omnipotent. He could destroy and create in a second of time; but in the account we have of the Deluge it seems to be natural. Geologists think so; but a destruction and re-formation of the earth requires time.

In the issue of 'Land and Water,' of August 8, 1868, a writer attributes the warm summer of that year to an effect on the Gulf Stream, caused by Vesuvius. This is his opinion, of course liable to be mistaken; but he refers to a change which an earthquake *did* actually cause in a current in the Pacific in 1835. We here have positive proof of a very great effect, proved in one case to have been caused by an earthquake over a large unknown extent of surface, and possibly another.

In his 'Pre-historic Times' (p. 292), Lyell says: 'We also learn from M. Venetz, that whereas between the eleventh and twelfth centuries all the Alpine glaciers were less advanced than now, they began in the seventeenth and eighteenth centuries to push forward, so as to cover roads formerly open, and to overwhelm forests of ancient growth.' Here is a space of six centuries entirely blank.

Are we to understand from this that the glacier has increased in size from mere growth, or has it *slided* down the mountain? An increase of growth would be gradual, and would not be spoken of as overwhelming forests, though it would destroy them; but, as it is well proved our European winters grow milder, how can a glacier grow, more particularly at its lowest or warmest end? If the mountains have been raised by volcanic action, and the sides become steeper, the mere specific

gravity of the glacier would cause it to slide down or to '*advance.*' Would not a very slight earthquake assist the descent—one which had a tendency to raise the mountains?

I have supposed that the earth or dry land was floating on subjacent water; this water was doubtless gradually forming our present stratified rocks by the subsidence or precipitation of sand and other substances held for a time in suspension.

In the Prayer Book version of Psalm xxiv. we find the world or earth described as 'founded' on seas and prepared on 'floods.'

When the Deluge came on, 'the fountains of the deep' throwing up this water, the earth or land would subside or sink, and subsequent volcanic action would force these rocks, when consolidated, through the land or crust of the earth. Hydraulic pressure of water above, volcanic force below, would consolidate our rocky strata. *

Lyell (vol. iv. p. 324) says, 'It would be impossible, if the earthquake should raise the Bund still higher, and sink to a lower depth the adjoining tract, to discriminate by any geological investigations the different effects of the two earthquakes, unless a minute survey of the effects of the first shock had been made, and put on record. In this manner we may suppose the strata to be bent, again and again, in the course of future ages, until parts of them become perpendicular.' These remarks are with reference to an earthquake in Cutch. Will not this suit exactly my theory, in what is visible

* If 'the fountains of the deep' were volcanoes, we know of over 400; if as many exist below the ocean, we have 800 acting together on the strata not consolidated.

all over the world? Yet, having no records, he says, 'Certain tracts have been depressed and elevated several times.'

As regards the goings and returnings of Gen. viii. 3, it seems to me they are to be applied entirely to the 150 days. The words are, 'And the waters returned from off the earth continually;' the margin says, 'In going and returning;' which implies, they washed back and forth, as the 'storm waves of cyclones,' or the 'rollers' of earthquakes do. 'And after the end of one hundred and fifty days the waters were abated,' or subsided—'after,' not during, the 150 days; and then the sacred writer says the waters decreased, having still a constant movement (see margin) or tide-like motion, till the tenth month, making a total of 223 days or years, during which time the waters were in a state of agitation.

I do not know how it may strike others, but it appears to me that St. Peter, in his Second Epistle, iii. 5, intends to describe a world different from ours, by using the words, 'The earth standing out of the water and in the water.' Surely we know that our earth does not stand 'in the water,' for we have reason to know all our oceans have a bottom; therefore, the *waters* stand in the earth! See Psalm xxiv. in English Prayer Book version.

I think if geologists will consider that it was possible the Deluge may have acted in this way, viz., forty years' increase of water, 110 during which the water was at the same height, followed by seventy-three years of decrease, all accompanied with violent action, which caused continual 'rollers,' waves or currents, they will find many of their difficulties disappear.

As for the hybernation, I cannot bring any Bible texts to support it, unless it is Habakkuk iii. 11. In this chapter he appears directly to warn the Jews, that as the old world was destroyed by the Deluge, so will his denunciations against Jerusalem be fulfilled. His words are, 'The sun and moon stood still in their habitations.' Perhaps also the fifth verse of Psalm xc., which is attributed to Moses, alludes to it: 'Thou carriest them away as with a flood, *they are as asleep.*' Though we know the sun does not move, the Jews did not, and it is constantly spoken of in the Bible according to its appearance. As there was no standing still of the sun in the passage of the Red Sea, these words cannot apply to that event. If at the time of the Deluge the motion of the earth was suddenly arrested, as perhaps these words imply, and the face of the earth was a low undulating plain, would not the impetus which the ocean had, drive the waters over a large extent of land? Some think this expression of the prophet alludes to the sun standing still during the battle of Gibeon; but I cannot separate it from the context, which to me seems to imply some great catastrophe the Jews knew of, like the Deluge described in Genesis. With respect to the stellary convulsion caused by a change in the earth's weight, in Vyse, vol. ii. p. 321, there will be found an account of an Arabian MS. at Oxford, which refers to an old Coptic papyrus, giving an account of why the Pyramids were built. Those who wish to see the whole must refer to the Colonel's work; but I will extract a portion, which describes a stellary convulsion.

Any one who will compare the king's dreams with

Pharaoh's two dreams will see a decided resemblance in the phraseology—the two dreams, succeeding nights; for the expression in Genesis, 'slept again,' does not imply a second sleep the same night, but is an Eastern form for 'another night's sleep.'

It will be seen that this MS. gives the king as living over 300 years; if it is a mere human fable, why should the inventor give him a length of life only found in Scripture?

In vol. ii. of Vyse, p. 321, he says, under head of *Masoude*, 'The manuscript of the Akbar Ezzerman at Oxford was so much decayed that recourse has been had to the works of other authors, who have given the same account in nearly the same words' (naming them). 'Masoude's account professes to relate the Coptic tradition, which says that Surid, one of the kings of Egypt before the Flood, built the two great Pyramids; that the reason for building the Pyramids was the following dream, which happened to Surid 300 years before the Flood. It appeared to him that the earth was overthrown, and the inhabitants laid prostrate upon it; that the stars wandered confusedly from their courses, and clashed together with tremendous noise. The stars were dark, and veiled with smoke. Early in the morning he assembled the chief priests from all the nomes of Egypt.' A note by Dr. Sprenger says the words and designation of the high priests and the general tenour of the story is not Arabic. 'When he related his two visions.' I have not alluded to the division in two visions, as I did not wish to extend the extract more than needful to explain it to those who cannot refer to a copy of Vyse's work.

The high priest, whose name was Philimon or Iklimon, spoke as follows: 'Grand and mysterious are thy dreams; the visions of the king will not prove deceptive. I will now declare unto the king a dream, which I also had a year ago. The firmament descended from above till it overshadowed us as a vault;' and in a note Dr. Sprenger says, 'Some histories say that Philimon was with Noah in the ark.'

I shall probably allude to this tradition again. Let me here, however, point out not only the convulsion among the stars, but their being 'dark and veiled with smoke.' Does not this look like volcanic eruptions? Also the time of 300 years for the dream before the Flood, which tallies very nearly with my two spaces of 200 for Noah's being a preacher, and the 117 for building the ark. I did not possess Vyse when I worked out my theory. Have we here a story made out of Cheops' sacred book? and was Philimon Cheops or Shem? It will be said, 'This is merely a Coptic tradition.' Granted; but I fancy nearly all traditions have some foundation, though much perverted or distorted; the 'seven sleepers,' from which Rip Van Winkle perhaps descended, possibly had their origin in Noah's hybernation. Allowance, too, must be made for the florid exuberant style of Eastern writers in this Arabian MS. When God made the world, he pronounced it 'very good,' or *perfect*; but is it so now? Our seasons are not equal to the seasons of the southern hemisphere, being nearly eight days different; therefore we are not perfect. Again, our year is 365·2422 days; if it was only ·0078 of a day longer, then our Bissextile system would regulate it; but we are again forced to regulate

that by foregoing a leap year at long intervals. Again, some difference is found in our solar and stellar day.

How did this happen? We may be sure it was not so in the days of the antediluvians. Has it been that by the abstraction of water into the rain-clouds, from the lower waters (Gen. i.), our earth revolves quicker by nearly twenty-one minutes daily (being lighter), to that extent shortening our day, and causing the earth in its annual orbit to revolve 365·2422 times, against 360 times in the antediluvian ages, the orbit being the same? This would again affect the moon, which in pre-deluge times would be always full;* thus we arrive at the reason why the Egyptians began with a 360 day year of 12 moons of 30 days; it was derived from the sons of Noah, with their antediluvian habits. In process of time, when records began to be made, the error was discovered. In fact, we are like a machine which once was perfect, and has received a violent blow, or wrench, aptly described by St. Paul, where he says, 'The whole creation groaneth and travaileth;' not man only, but '*the whole creation.*' I find the following remarks in Smith's 'Bible Dictionary,' under the head of *Noah*, vol. ii. p. 575: 'Was the rainbow, we then ask, never seen before the Flood? Was this "sign in the heavens" beheld for the first time by the eight dwellers in the ark, when, after their long imprisonment, they stood again on the green earth, and saw the dark humid clouds spanned by its glorious arch? Such seems the meaning of the narrative; and yet this

* Bunsen says, 'Once the sun and moon were in accord,' but gives no reasons for that opinion. A watchmaker intends his watch to be *perfect*, or keep exact time.

implies that there was no rain before the Flood, and that the laws of Nature were changed.' If I am right, and the rain-clouds were formed by absorption since the Deluge, there was no change in the so-called laws of Nature.

Possibly the mean level of our ocean is lower than that of the antediluvian world, and in all geological research this must be borne in mind; mountains must not be supposed to be *entirely* elevated: a certain or rather *uncertain* amount of subsidence of the ocean must be considered as having taken place.

As regards the mountains, I do not think any marks of the agitation of the water can be traced upon them: 4,500 years would do much to destroy that; but I do not consider they were elevated until the latter years of the Deluge, and subsequently. The volcano of Jorullo, in Mexico, in six months was thrown up 1,600 feet above the plain, and has ever since been inactive. The ark is supposed to have rested on Ararat, and I believe one writer of modern times has stated, '*When* the snow thaws it will be revealed.' Possibly. But the Bible says, 'On the mountains of Ararat;' and I believe the word may be translated *Armenia*—probably meaning a spur of the Armenian hills, or 'hills connected with the mountains of Armenia.' Many parts of Scripture will bear me out in this—2 Kings xix. 37, also Isaiah and Jeremiah. Assuming that there were no mountains before the Deluge, has there been time since for their elevation? It is only about 200 years that any certain records have been made of volcanic action; we cannot yet see if there are any fixed laws which rule it; perhaps in future years these laws will

be read; it is not yet fifty years that we have begun to have any kind of insight into the law of cyclones; our great-grandfathers would have laughed at anyone who foretold that we should ever be able to read the course of a hurricane; why, then, may not our descendants be able to point out the law of earthquakes? for, that there is some law I have no doubt, from the simple fact that all nature seems to be guided by laws.

Lyell says any writer on the Flood (I prefer—it may seem fanciful—the Deluge) must notice all the circumstances enumerated by Moses, but especially the olive tree; this I have attempted to explain. He does not say what other circumstances he alludes to. In reading the account in Genesis, there seems to be nothing but water from above and water from below mentioned. Am I wrong in supposing the last implies volcanic action?

If my interpretation of 'rested' be approved of—and the ark did not settle finally in Armenia,—may it have been in China? Gen. xi. opens with the people described as moving *from the East*, and arriving in Shinar; now, our Shinar is not to the west of Mount Ararat. I am disposed to suggest, they perhaps were moving from China to the setting sun, before the mountains between China and the Euphrates had risen to their present elevation.

This is a *cosa*. China and Shinar are like in sound, and Chinese policy is very old. There is no doubt there has been a plutonic centre in Asia, between China and Persia. This would give abundant time for the dispersion of animals. We must infer from the description of Eden, the locality was known and recog-

nised after the Deluge; therefore that the surface was not then much altered, however much it has been changed since in form and face.

I believe the Chinese records have been stated to go back into the twenty-sixth century before Christ. I make the Deluge to have ended in 2681 B.C.; and as Noah lived 350 years after, he died in 2331 B.C. In Gen. xi. 4 we have, 'And let us make us a name, lest we be scattered abroad upon the face of the whole earth.'*

What do these words imply? Do they refer to what had happened in antediluvian times, and which is now denied by science? or do they indicate that parties had already gone off, and the leaders inferred others would? There is one fact which cannot be gainsaid: the Chinese civilisation is the oldest and the most fixed of any which has ever existed.

I am afraid these remarks of mine will frighten some people; but I merely throw them out without any intention of making a stand about them. There is nothing in the Bible to tell us *where*, on the face of the earth, Shinar is; we have always supposed it was on the Tigris or Euphrates, and have associated the Tower of Belus with the work spoken of in the Bible; no doubt the ancient Hebrews were of that opinion, but they were very poor geographers, according to our notions. There are some rather curious facts, which lead me to think we may have been wrong. Not that it makes the least difference in the truth of the Biblical tale, whether *we* are mistaken or not. Perhaps it is better there should be a doubt, for if it was certainly known, it might become a place of pilgrimage to devotees and fanatics.

* In his 'Life and Teachings of Confucius' Mr. Legge says, 'Yaou (Noah ?) ascended the throne 2356 B.C., but died 2256.'

But Shinar and China are very curiously alike in pronunciation, as are also Japan and Javan. It is absurd to say, Javan is Ionia; Ionia was not settled when the original of Gen. x. was written. This has come to us from the LXX, from whom we have had also many other mistakes transmitted to us. The civilisation of both China and Japan is doubtless more ancient than any existing form of Asiatic civilisation, and shows less signs of decay. The Chinese records are better kept, and more to be depended on, than any other Asiatic records. Again, we have the singular coincidence of Yaou and *Shun* associated together (see Legge's 'Confucius'), where, at p. 294, we have this extraordinary expression: 'The master said, How greatly filial was "Shun!"' In Hebrew, as well as in hieroglyphics, *n* and *m* seem to have been interchangeable.

I hope my readers will allow me to have the 'cosa,' that perhaps the Yaou and Shun of these Chinese annals correspond with our Noah and Shem.

The reign of Yaou is put in B.C. 2356; he reigned 100 years—a very curious length of reign. Shun succeeded two years after his death, in B.C. 2254, within forty years of the date when I make Shem and Abraham meet. People can refer to Dr. Legge's work, and see if I have misrepresented him. My deductions, or 'cosas,' are my own.

There is one of the large islands in the Indian Ocean, I am not sure which, but I believe Java or Sumatra, in which a greater variety of animals may be found than in many a larger space of land. Is there any thing to be learnt from this? How did elephants, hippopotami and rhinoceroses, as well as boa constrictors, get to this island?

Let us if possible place ourselves as spectators of the exit of the animals from the ark. Supposing the tale not to be a fable, is it not natural that like should herd with like? for example, would not the kangaroo couples keep together? Then, supposing the chain of land, or *bridges*, which then connected Asia, i.e., the peninsula of Malacca, through the large islands, with Australia, was not broken, is it difficult to suppose they travelled together? So with other animals. The exact meaning or explanation of 'clean' and 'not clean,' we cannot clearly explain. Are *carnivori* and *herbivori* implied? I do not think they refer to the Levitical clean and unclean.

Is it possible the fable of the island of Atlantis had its origin in a submerged continent in the Pacific? Do not all those reefs and islands betoken submerged land? What can be the origin of those stone fortifications on the island of Opara, if it is not a part of the antediluvian continent? God said He would destroy every living substance which He had made, from off the face of the earth; but He does not say He will destroy all the *works* of man.

Vol. ii. p. 48, Lyell says, speaking of the Kurile islands, 'In these, and in the bed of the adjoining sea, alterations of level have resulted from earthquakes since the middle of the last century.' Again, p. 49: 'The Pacific Ocean, indeed, seems in equatorial latitudes to be one vast theatre of igneous action.' *

From these, no very great subsidence of land would

* All these seas are shallow. I cannot find a record of deeper water than 100 fathoms in very extreme cases. See Wallace's 'Malay Archipelago.'

break the bridges which permitted the animals to go to America, Australia, and the large islands in the Indian Ocean. Is it too much, from what we already know of volcanoes, and volcanic action, to suppose such a thing? Is it quite beyond the reach of philosophical enquiry? We know earthquakes caused by volcanic forces do elevate and depress: they sometimes elevate and depress the same tracts. See the map in Scrope's 'Volcanoes,' and the circle noting the earthquake in 1815, of Tomboro.

Let me here draw attention to some extracts from Lyell. In vol. i. p. 116, I find, 'If we could behold in one view all the volcanic cones,'—allow me to suggest, mountains are thrown up by volcanic forces, whether volcanic cones or not—'thrown up in Iceland, Italy, Sicily, and other parts of Europe' (why not the world?) 'during the last 5,000 years, and could see the lavas which have flowed during the same period; the dislocation, subsidences, and elevations caused by earthquakes; the lands added to various deltas, or devoured by the sea; together with the effects of devastation by floods, and imagine that all these events had happened in one year, we must form most exalted ideas of the activity of the agents, and the suddenness of the revolution.'

I believe the revolution was sudden; but I do not believe the highest peaks of the Hymalayas, or Andes, were thrown up in 10, 100, or even in 1,000 years. Volcanic force was hid in the bosom of the earth, till wanted, as our gunpowder is prepared, and stored in magazines, till it is required, and then withdrawn in such quantity as necessary, whether for a friendly salute or to destroy a Sebastopol.

Again; 'If geologists, therefore, have misinterpreted the sign of a succession of events, so as to conclude that centuries were implied, when the characters imported thousands of years, and thousands of years when the language of nature signified millions, *or vice versâ*, they could not, if they reasoned logically from such false premises, come to any other conclusion than that the system of the natural world had undergone a complete revolution.' And has it not? Do we not find evidences of it in the remains of animals only suited to a tropical climate, high up in the temperate zone? Does not this *prove* some great revolution?

In vol. i. Book i. chap. viii., in the concluding paragraph, Lyell says, 'Such enquiries, however, can never supersede the necessity of investigating the consequences of the varying position of continents, shifted as we know them to have been, during successive epochs, from one part of the globe to another.' Should he not say 'suppose,' not *know*? Would not change of form or surface have the same, or a similar effect? But I demand his *records* of these shiftings; I own to one; I infer it would, from his remarks, vol. i. 197: 'The climate of the once fertile plain of Malpais, in Mexico, must differ materially from that which prevailed before the middle of the last century; for since that time, six mountains, the highest of them rising 1,600 feet above the plateau, have been thrown up by volcanic eruptions. It is by the repetition of an indefinite number of such local revolutions, and by slow movements extending simultaneously over wide areas, as will be hereafter shown, a general change of climate may be brought about.'

No doubt, changes in the elevation of land, causing mountains to be raised, must affect climates; also changes of currents, such as the Gulf Stream and in the Pacific, already alluded to. If this change noted in the Gulf Stream remains permanent, our seasons will be materially affected. Will not such changes influence the duration of all life?

In the London *Times* of June 29, 1868, reporting the arrival of H.R.H. the Duke of Edinburgh, speaking of his meeting icebergs the reporter says, 'The temperature of the sea was either the same as the atmosphere, or higher, but *never lower*: in one case 3° in another 4° higher.' Was this deviation from the general rule caused by the volcanic eruption which broke out in March at Manua Loa? As a rule, when icebergs can be seen 'the sea is colder than the air.'

It appears to me, from the reports in the papers, the November earthquake, 1867, of St Thomas, was felt in Canada. A report has been in the papers, of a great subsidence in the water at the Falls of Niagara, on the American fall; *if true*, I imagine it indicates a slight elevation on the American side, or perhaps a subsidence on the Canadian, where the rock stratum declines.*

Again; 'We know that one earthquake may raise the coast of Chili, for 100 miles, to the average height of three feet. A repetition of 2,000 shocks, of equal violence, might produce a mountain chain 100 miles long and 6,000 feet high. Now, should one or two only of these convulsions happen in a century, it would be consistent with the order of events experienced by the Chilians from the earliest times.' Yet Lyell says, vol. ii. p. 181, that we have no records of earthquakes

* This change is confirmed September, 1869.

to be depended on, further back than 180 years, 'But if the whole of them were to occur in the next hundred years, the entire district must be depopulated, scarcely any animals or plants could survive, and the surface would be one confused mass of ruin and destruction.'

But what if this change were to be spread over *forty-five* centuries, and not *one*, and the most violent shocks happened when the land was either not populated, or only very thinly? I find the following expressions in the same writer, vol. ii. p. 41: 'How long an interval of rest may entitle us to consider a volcano as extinct, is not easily determined; but we know that in Ischia there intervened between two consecutive eruptions a pause of *seventeen centuries*.' * Page 42: 'A year never passes in this province (Villarica in Chili) without some slight shocks of earthquakes.' Page 178: 'During the last century about fifty eruptions are recorded of the five European volcanic districts. Now if we consider the active volcanoes of Europe to constitute about a fortieth part of those already known on the globe, and calculate that, one with another, they are about equal in activity to the burning mountains in other districts, we may then compute that there happen on the earth about 2,000 eruptions in the course of a century, or about twenty every year,' Does not this show abundant power to have re-formed the face of the earth since the year B.C. 2681, or in 4,548 years? during 200 only of which, mankind have been, like Captain Cuttle, 'making a note of it.' I must refer my reader to Lyell's work, Book ii. chap. xviii., where he will find at large an account of the changes which have taken place in the land of Sweden, and to vol. i. p. 216, where the

* May there not have been earthquakes not recorded?

same author says, 'The former connection of the White Sea and the Gulf of Finland is proved by the fact that a broad band of tertiary strata extends throughout part of the intervening space.' I remember reading, a few years back, an account of a yacht voyage to Spitzbergen, I think by Lord Dufferin; in which, or in 'A season among the Seahorses,' it is stated that skeletons of whales taken by the Dutch whalers not 300 years ago, and then sunk, are some of them now high and dry, in consequence of the rise of the land. And in Lyell, vol. ii. p. 51, on the steppes of the Caspian, 'A low and level tract, called the steppe, composed of tertiary strata, containing many shells, now common in the adjoining sea, skirts the north-western shores of the Caspian. This plain often terminates abruptly by a line of inland cliffs, at the base of which runs a kind of beach. Pallas had endeavoured to show that there is a line of sandy country which indicates the ancient bed of a strait, by which the Caspian was once united to the sea of Azof.'

But let us compare some of his remarks with the words of Scripture: 'The fountains of the great deep,' which preceded the opening of the windows or flood-gates of heaven. In this I see volcanic action; the outburst of a volcano is often commenced by a convulsion, an opening of the earth, and a flow of water. Vol. ii. p. 43, we have, 'Deluges are often caused in the Andes by the liquefaction of great masses of snow, and sometimes by the rending open, during earthquakes, of subterranean cavities filled with water.' Again, p. 203: 'During the earthquakes which destroyed Caraccas, an immense quantity of water was thrown

out, at Valecillo, near Valencia, as also at Porto Cabello, through openings in the earth.' Also, speaking of the earthquake in Peru, in 1746, p. 257, 'A volcano in Lucanas burst forth the same night, and such quantities of water descended from the cone that the whole country was overflowed; and in the mountains, near Patao, called Conversiones de Caxa Marquilla, three volcanoes burst out, and frightful torrents of water swept down their sides.' Sicily, in 1693, p. 261: 'The bottom of the sea sank down, and water bubbled up along the shores. Numerous long fissures of various breadths were caused, which threw out sulphureous water.'

At p. 141, he speaks of an eruption in the island of Lancerote, thus: 'These dreadful commotions lasted without intermission for *five successive years*.' At p. 143, he says, 'No sooner do we study, and endeavour to explain submarine appearances, than we feel, to use a common expression, out of our element; and, unwilling to concede that our extreme ignorance of processes now continually going on, can be the cause of our perplexity, we take refuge in a pre-existent order of nature.' Would it not be as well to go to the oldest book in existence, and which pretends to give some description of the formation and changes in the world, and see if something cannot be gleaned from it by a careful and humble study? When out of our element, we are disposed generally to enquire and seek for knowledge which will enable us to get back: even fables are consulted.

In Lyell, at vol. ii. p. 145, I find he mentions several instances of islands thrown up by supposed

submarine volcanoes, one in the middle of the Atlantic, off the Azores, to a height of 300 feet above the surface of the ocean; he does not give the depth of the ocean, but we know from Maury's soundings in that vicinity, it must have been *one thousand* fathoms at least, and very possibly over two thousand. It was soon washed away by the waves; if it had been elevated, on dry land, no doubt it would not have retained its maximum elevation, but yet would have been much above Jorullo; one near Iceland, in 1783, and another in 1830. He gives also a long account of the island which appeared in the Mediterranean in 1831, where a short time before there were 100 fathoms of water; it was first seen on July 18, and on August 4 was 200 feet high, and three miles in circumference; it then began to diminish, and was gradually washed away by the water, leaving a shoal; on one part, apparently a permanent hard rock was formed, about twenty-six fathoms diameter, which he supposes was the consolidated lava of the crater, only about ten feet under water. 'At the distance of sixty fathoms from this central mass, the depth increased rapidly. There was also a second shoal, at the distance of 450 feet S.W. of the great reef, with fifteen feet of water over it, also composed of rock, surrounded by a deep sea,' (page 150). This looks very like two peaks of a mountain. On page 146 he says, 'On June 28, about a fortnight before the eruption was visible, Sir P. Malcolm, in passing over the spot in his ship, felt the shock of an earthquake, as if he had struck on a sandbank.' Similar shocks have often been felt and described. Does this explain the passage in Genesis, 'The ark

rested on the mountains of Ararat?' We cannot suppose Moses, or the original narrator, to have been well acquainted with earthquakes; and if it appeared to a British Admiral, in A.D. 1831, that his ship had struck on a sandbank, when it was an earthquake, may not a person in the ark have been in a similar manner deceived? Biblical expressions are suited to all states of knowledge. At page 158, he mentions shells found 300, 400, 500, and even 600 feet above the water in the great Canary Island. At page 185 he mentions that in 1835, on the coast of Chili, in the great earthquake of February 20, vessels grounded which had been anchored in seven fathoms, or forty-two feet of water. What a roller this must have been, and how extensive must have been the action of the earthquake, to create such a sensation in the Pacific! Seven fathoms are more by twenty feet than the depth of water said to have covered the *land* not the *hills*, in the Deluge. Fifteen cubits were enough to cover the 'high hills' or mountains. At the time of this earthquake, 'more than 300 shocks were counted between February 26 and March 4' (page 187), or in six days. On page 197, speaking of the earthquake of 1819, which caused a great subsidence in the Gulf of Cutch, and yet did not then throw down the buildings it submerged, he says, 'It has been already ascertained that this new-raised country is *upwards of fifty miles* in length from east to west, running parallel to that line of subsidence before mentioned; its breadth from north to south is conjectured to be, in some parts, *sixteen miles*, and its greatest ascertained height above the original level of the Delta is ten feet—an

elevation which appears to the eye to be very uniform throughout. We here find proofs of subsidence and elevation side by side. May not subsidence have been going on in the Pacific and Indian Oceans whilst elevation has been going on at the North Pole? We have proof of elevation at Spitzbergen, in Sweden, in Russia, and in Asia; there are towns in Europe which once were seaports, and now are inland. Has not this been caused by elevation? May we not, then, infer that *generally* there has been a subsidence in the Pacific and Indian Ocean, which has balanced the rise at the north, and thus kept the level of the ocean the same? In this case, my idea of placing the ancient fabulous continent of Atlantis in those seas will not, perhaps, appear so very absurd. Of course there is no proof of it, and indeed there never can be.

We find that earthquakes, though sometimes, and indeed generally, very destructive, are not always so. Lyell says, p. 204, 'The motion of some of these shocks was horizontal, and of others perpendicular, and the vertical is said to have been much less desolating than the horizontal.' This being the case, elevation may go on, and no record be made of the earthquake; this is evidenced by Egypt. Lyell says, vol. i. p. 14, and vol. ii. p. 57, that Egypt is nearly exempt from earthquakes;* Professor Smyth felt one when there, and mentions another, which in 1855 injured a house in Cairo. By his observations, as recorded in his third volume, it is evident that the floor of the King's Chamber is now no longer level; the whole work of the Great Pyramid is so very accurate, we may be certain the original builders left it plumb, and the whole change of level

* Did not one destroy the Alexandrian Pharos?

can only have been caused by an elevation of the whole pyramid. Vyse too, vol. iii. p. 18, says as follows: 'The roof had been formed by three tiers of blocks, forty-eight feet six inches in length. Many of them had been destroyed, but upon the whole, the interior was in a better state than that of the other two pyramids of Abousir; it was, however, completely ruined. The marks of wedges were everywhere visible; but it was difficult to imagine that any power, excepting that of gunpowder, could have effected so much destruction.'

In my mind, it must have been caused by an earthquake, or earthquakes. He does not say there were any signs of gunpowder having been used, and had it been, it would have left some marks; the marks of wedges are more likely to have been those made in excavating the blocks, than made by any attempts at destruction. How could men work for any time in such a chamber, and for what object? It had been ascertained by Al Mamoun, or whoever broke into the Great Pyramid, that nothing was to be obtained. Two earthquakes are reported in Egypt in the winter of 1867–8. It is a well ascertained fact, that up to very nearly the end of the first century of our era, if not even later, the entrance to the Great Pyramid was open. Pliny visited the lower chamber, and Caviglia (see Vyse, vol. iii.), who cleared out the passage to it, found Roman uncials on the ceiling, made by the smoke of a torch.

Without doubt, the casing was shaken down by earthquakes, and the stones and rubbish, with the sand which drifted, hid the entrance when the Mahometans sought for it. Any one who will look at

the print in Smyth's work, of the apex of the second Pyramid, and observe how the casing and backing stones overhang, will at once recognise what a work of danger it would be to attempt to get them down. But we can see by the Sphinx that a very great change has taken place in the land at Gigeh, in the course of seventeen centuries. Trevor says, at p. 53, 'The height from the floor, between his paws to the crown of his head, is seventy feet.' He mentions Rameses the Great, and others, as his worshippers, from inscriptions found. Caviglia also gives many Greek and Roman inscriptions, showing evidently that for a long course of years it remained unhid by the sand. It is not in the least likely that all these kings or rulers who had these inscriptions made, each time went to the trouble and expense of clearing away the sand. Rameses the Great may be considered as reigning in B.C. 1525, and Trevor says, 'A small building, on the steps in front, is inscribed to the Emperor Severus, who visited Egypt A.D. 202.' We may therefore safely infer, that up to that time, and how long after we cannot pretend to say, the Sphinx stood out in its pristine grandeur. How can this great change have been caused, unless by earthquakes elevating the land generally, and raising it out of the reach of the Nile's overflow, thus causing a great increase of the sandy soil liable to be moved by winds? The breach at Semneh, which caused the seven years of abundance, was, no doubt, first caused by an earthquake, and enlarged by the Nile, till the lake or morass was entirely drained.

I maintain, we have abundant evidence before us, there is enough of volcanic or plutonic power in the

earth to raise, in forty-five centuries, all our known mountains.

Lyell says, there are about twenty earthquakes in a year; that one has been known in Cutch to raise fifty miles of land ten feet, and another to raise in Chili 100 miles three feet. Now, at twenty per annum in forty-five centuries, we have no less than 90,000 earthquakes, which at ten feet each would raise fifty miles 900,000 feet; and at three feet each, raise 100 miles 270,000 feet. All these are extremes, it is true, but it shows the power. Now, we know that volcanic or plutonic force depresses as well as raises. Lyell says, in Cutch the earthquake which raised fifty miles of territory depressed an equal quantity. Scrope says, p. 278, 'On the other hand, the interval between these two great lines of eruptive activity, fringing the opposite continents of Asia and America, is occupied by the vast depressed basin of the Pacific Ocean, great part of which is believed, with apparent probability, to have been undergoing for ages a continuous process of subsidence.'

Under these circumstances, is it very wild to suppose that these islands once were connected? in which case, are not the presence of population and animals easily explained?

Is it not natural to suppose that the great change in the duration of life after the Deluge must have been influenced by some atmospheric changes, originating in a change of the face of the earth at that time, and again, another about the time of the dispersion?

If this last was a great elevation of mountains, the dispersion would be an effectual separation of men.

We can see a *third* in the great destruction of

Sodom and Gomorrah, when the 'plain of Siddim' was turned into a stagnant salt sea, and the outlet of the Jordan in the Gulf of Akaba was closed.*

Sir Stamford Raffles found by Javanese records, that in 1188 the islands of Sumatra and Java were separated, being before united, and though he did not credit the annals, because of geological differences, there are the records. These annals record also that Sumatra, Java, Bali, and Sumbawa were once united, and it is well known that the whole sea from the Straits of Sunda to Canton River is shallow, and does not generally exceed twenty fathoms of water.

Is it not Plato who mentions the island of Atlantis, and did he not obtain his information from an Egyptian priest, or through Solon? If so, may we not suppose an Egyptian was better acquainted with the Eastern than with the Western Ocean? with the Straits of Babel-mandeb than the Straits of Gibraltar?

Again, at p. 303 Scrope says, speaking of the diagonal dislocations on the earth's crust, as evidenced by volcanoes: 'Does not this singular chain of coincidences—which cannot be merely fortuitous—suggest the notion that the sudden and violent rise of a tidal wave of subterranean expansion, accompanied by its antipodal swell, may have fractured the earth's crust along lines diagonal to the direction of rotation?'

If any one will turn to the map in Mr. Scrope's work, he will find marked on it the limit of the earthquake of Tomboro, in 1815, which was felt from the north of Australia, nearly to the south extremity of

* I believe the 'plain of Siddim' may be rendered 'the laboured,' or *cultivated* 'land.'

the peninsula of Malacca, and shows how very easily the bridge which once connected the two was broken, and by what we call a 'common act of nature.' Mr. Scrope's remarks prove too, that the bridge between Asia and America could have been broken with equal facility, though we have not any record of a like earthquake amongst the Aleutian islands.

When we consider all these facts calmly, I cannot but feel it will be acknowledged that the Biblical account of the Deluge *may be* true, and therefore we may as well admit it, as we cannot prove it positively incorrect.

In his 'Great Stone Book of Nature,' Ansted says, p. 152, 'Grouping the earthquakes in months, we find the greatest number have taken place in the month of January, and the smallest number in July, the proportion being about *three* to *two*. So again, if we divide the year into quarters, in the three first months of the year 1669 are recorded, in the three early summer months, only 1,281. There seems no way of escaping from the odd conclusion, that earthquakes are more likely to take place in cold than in warm weather.'

May not atmospheric pressure have something to do with it? The barometer is lower in winter than in summer; and explosions of gas in coal mines have been known to follow a fall in the mercury.

I see it stated in the *Times*, the eruptions at Vesuvius occur daily, about thirty minutes later each day, and the correspondent remarks, 'they would appear to be influenced by the moon.' May we not here see an instance of atmospheric influence? May not this apparent tide in the volcano be caused by the influ-

ence of our tides on our atmosphere? There can be no doubt but our tides do affect the atmosphere, the low tide causing, so to speak, a vacuum, which is filled by atmospheric air; we cannot see it as we do the tide of the sea, and if we feel it, we put it down to a breeze or a lull in the wind.

'If, then, volcanoes are safety-valves, which occasionally permit the vapours from the earth's interior to escape and carry with them millions of tons of solid matter to the surface, and if earthquakes afford ample proof that convulsive movements, affecting large but variable tracts of land, are also extremely common, there appears ground for believing that the ordinary course of nature provides means for making alterations of level, and modifying the condition and position of rocks at the earth's surface to the extent described by geologists. In the neighbourhood of Vesuvius there is proof of both elevations and depressions to the extent of twenty or thirty feet, along an extended line of coast. The rate a few years ago was estimated at an inch every four years, but is now different.' Page 154: 'But we have further proof that even where volcanic eruptions do not extend, there are still upheavals and depressions going on, calculated to alter in time the proportion of land and water in certain districts.' He mentions the Baltic. But might he not say, not only 'in certain districts,' but over the whole globe?

Is it too extravagant to suppose volcanic force is gradually expanding the crust or shell of the earth's boiler, and wearing it thinner? If so, *the ordinary course of nature* will in time cause it to burst, and we shall be burnt up, as the Bible tells us will be the case.

An artilleryman knows his gun is dangerous, but thinks it will stand another round; he tries it: the gun bursts, and he is blown to atoms. So with the steam engine; the engineer knows the plates of the boiler are not safe, but he fancies they may last the day: they explode, and we well know what happens.

But *we* cannot see into the state of our plates; at the same time, our common sense must tell us they are wearing out, and some day must give way; observation, too, tells us there are enough of volcanoes known, in active or dormant states, to destroy the world should they break out together; we are told this will happen; and further, there is One who alone knows when the plates will yield and burst. He knew, when He made this world, how long the boiler plates would last; and this, some people would call *predestinating* it to be destroyed at a certain date.

Again, p. 155: 'Thus, then, it appears, by natural causes still in action, more marked in some parts of the world than in others, but traceable over a large surface, there are changes taking place whose tendency must be to break up, compress, and tilt up the various rocks between the seat of disturbance and the surface. However small the result may seem at one operation, still, as it goes on at intervals without limit of time, it must at length produce large and important consequences.'

When we know, or rather feel convinced, over 6,500 earthquakes have been noted during the last *twenty-six* centuries, some, like the one in Calabria in 1783, continuing almost continuously *three* years; or like the celebrated Lisbon one of 1755, which was felt from Iceland to Mogador, and from Canada to Töplitz, and from Swe-

den to the West Indies; or like those which accompany the eruption of Vesuvius this very year (1868), and have been felt in the West Indies, and as I am writing, on the 4th of April, the very day of a violent eruption at Jersey and in Brittany, I ask, is it too much to suggest that *all* our mountains may have been raised since the year 2700 B.C.?

Read Professor Ansted's words, and then reflect that the whole north of Norway and Sweden, it is well known, rises at the rate of five feet in a century; turn to a map with volcanic action marked on it, and listen to geological teaching, and you become convinced the same is going on across the North of Asia. If so, the ocean would show it unless there be somewhere a great subsidence, as there has been in the Indian and Pacific Oceans.*

If the report is true, that the Gulf Stream has been accelerated, there has been an elevation of the bed of the Atlantic, caused by the earthquakes set in motion by Vesuvius, and felt in the West Indies just one week after the eruptions first began. Common observation tells me this. Am I wrong?

Let me here notice the very violent earthquake of August in this year (1868) in the Pacific, and which has been felt from the shores of California to New Zealand, though little destruction was done except in South America; but it is said the American admiral, in sounding some distance, not stated, off the coast of South America, found 200 fathoms less water than he expected, after this event.

I insert this as a note merely bearing on volcanic

* Does not this prove the centre of gravity of the earth is or has changed?

power—out of place in a book scientifically and methodically written; but I make no claim to be a scholar.

Also we find, p. 171, 'The reader may see, that in thus speaking of rocks originally placed at the bottom of the sea, and now lifted up to occupy positions in upper air, so far removed from their origin, it has been taken for granted that certain movements have occurred upon the earth; and it may seem almost necessary that these must have been on a far grander scale, and therefore more destructive, than any that living men can either have experienced or imagined.

'I believe that there is no greater or more mischievous error than this. I say no greater error, because it assumes the law of Nature to involve a system of interferences—not adaptations; and to intelligent human beings endowed with Divine intellect, interferences, if not called for manifestly to answer a special moral purpose, denote weakness and partial knowledge. On the other hand, a system so contrived as to involve in its very nature a complete and continuous growth and adaptation, indicates perfect foreknowledge and wisdom.'

When I consider these remarks, and read over the first eight chapters of Genesis, it seems to me that they agree perfectly. The writer says 'perfect foreknowledge and wisdom' will so adapt things, that constant or any interference, except 'to answer a special moral purpose,' would not be required. Did the antediluvian sins call for this interference? We are told by the Lord they did, and that He did interfere.

By merely opening 'the windows or floodgates of heaven,' and allowing the rain to fall, a violent outburst of *all* the volcanoes, '*all* the fountains of the

deep,' took place, the natural effect of which was apparently so to re-form or change the surface of the earth, as to create what St. Peter speaks of as 'a new earth.' Volcanic force having once been let out, must still go on acting from natural causes, and will never cease until the final day. The reason why volcanoes were not felt before the Flood is from there being then no mountains, and the atmosphere being much rarer, there was not that effect produced upon volcanic force as there has been since the Deluge;* the rocky strata, too, were not then consolidated, but much looser and more pervious to volcanic gas. Besides, it is by no means impossible that the antediluvian plain, prairie, pampas, or steppe, was above a stratum of water. I believe there are passages in the Hebrew writings which describe such a belief; if so, would not the pressure of this falling water act like an overweight on the valve of a steam engine, and keep down the explosive force until it had gained sufficient strength to overcome it? Would not this be an ordinary operation of Nature? And then, a vacuum being created by the expulsion of the water, would not the upper surface collapse?

It has been found in Siberia, by boring, that in high latitudes there is a *stratum* of ice of unknown thickness some distance below the surface.

In the case of Sodom and Gomorrah, we find a case of violent volcanic action noticed in the Bible, within 500 years after the Deluge, and in less than 200 years after, the years of plenty in Egypt are caused by another outbreak; and in the book of Job, as well as in Deu-

* What we call barometrical pressure.

teronomy, we find distinct allusions to volcanic force and its effects.

Perhaps it will be asked, that is, if any one troubles himself to get thus far into my 'cosas,' do I mean to say that volcanic force did not exist before the Deluge? Far from it; I believe it existed from the time when God divided the waters under the firmament from those above; or rather, that this very separation of the waters relieved the earth of a great weight, which kept its volcanic forces depressed or confined. Being set free, their first energy was employed in forming the firmament or atmosphere in which subsequently the 'lights' were placed, as Scripture tells us. We know our atmosphere is a compound gas: it must proceed from something; and to me it appears to emanate from the minerals in a state of fusion within our earth. I dare say I am making mistakes—writing nonsense; but I am sure I am on the right road, and hope some wiser man will take up my ideas and put them in order. Its next action was the raising the land to form basins for the water.

According to my ideas, there being no rain before the Deluge, there would be nothing to excite an outburst from the volcanoes, which would work regularly like a well-managed steam engine; but when the Deluge came on—and I suspect the rain came down first—the change in the atmosphere would, 'in the common course of Nature,' overweight the boiler and naturally cause an outbreak of the volcanoes, more or less general, as the rain was.

If in Gen. vii. the words 'windows of heaven,' in the original Hebrew, are to the right of the 'fountains

of the deep,' they precede them, and show the rain came first. In the papyrus from Abou Hormeis, which I have quoted, the rain precedes the eruptions from the earth. This papyrus, being Arabic, is written like Hebrew.

Since this catastrophe, the different position of the water, raised from the earth into our rain-clouds, has caused a very different action of our atmosphere upon the volcanic forces in the centre of our earth. This action is further energised by the change of seasons, and the upheaval of the surface-earth into mountains, giving scope for the buried forces to act more freely. By the laws of gravitation, the rain liberated from overcharged rain-clouds must fall to the earth, thus making it fruitful.

Before the Deluge there were no rain-clouds, consequently, no rain; but since this great event happened to the world we have had summer and winter, showers and tempests, hail, snow, and frost, all acting directly on the atmosphere, and if not directly, at least indirectly, on the volcanic forces within the earth.

NOTE.

I have suggested, Noah during the Deluge was 'hybernating.' Perhaps he slept a year, then woke, then slept another year, and so on; this would agree with the periods, whatever they were, described in Genesis.

To an antediluvian, whose life was 900 years, a trance or sleep of one year is a shorter time than those trances of *six weeks* which are known to have many times happened to mortals whose lives rarely exceed seventy years: one year to Noah is the nine-hundredth part; but *six weeks* to seventy years a man's life, or *three thousand six hundred and forty weeks*, is a six-hundredth.

CHAPTER IX.

DILUVIAN COSAS—*continued.*

THE peculiar propositions, or 'cosas,' which I have thus far alluded to, are that Noah, with all in the ark, were in a state of hybernation, and that the words, 'The Lord shut him in,' imply it. Then, there was neither rain nor mountains before the Deluge; of both these facts we find, I think, conclusive evidence in our Bible. To those who demand how our mountains can have risen if there were none before the Deluge, I reply by quoting the words of one of the most eminent of living geologists, to prove, as far as we know, that our present mountains *may* have all been raised by volcanic force within 4,000 years, or, say since the Deluge. Here I bring science in accord with Scripture.

Volcanic force not only acts by elevation, it shows its power also by causing subsidences; * in it, then, we have a power that may not only have changed climates, and influenced the duration of human and animal life, as well, perhaps, as dwarfed their proportions, but may also have broken asunder the connections which existed at one time between Asia and America, and

* Causing elevations and creating subsidence, it changes the centre of gravity, makes our sphere 'wabble;' hence arise seasons.

also between Asia and the large islands, as well as the smaller ones in the Indian and Pacific Oceans.

But are the words of our authorised version a correct translation of the spirit of the original Hebrew text? I have an old Bible of 1608, which gives the following version for the nineteenth and twentieth verses of the seventh chapter of Genesis. Compare them with the authorised version; enquire and judge which are most correct, or if there is any real difference.

Thus, for verse 19, 1608 has 'The waters prevailed *so* exceedingly upon the earth, that all the hie mountains that are under the whole heaven were covered.'

The italic *so* is mine; our version has it thus: 'And the waters prevailed exceedingly upon the earth; and all the high hills that were under the whole heaven were covered.'

We cannot be too careful in considering the minutest difference in the two renderings of words in such a concise account as we have in the first ten chapters of Genesis.

The twentieth verse is 'Fifteene cubites upward did the waters prevaile, when the mountains were covered.'

The authorised version has, 'Fifteen cubits upward did the waters prevail, and the mountains were covered.'

Does the small verbal difference in any way affect the meaning?

The French version of the Old Testament strongly confirms my assertion: 'Les eaux se renforcèrent de quinze coudées par dessus, et les montagnes *en* furent couvertes.' Either, therefore, fifteen cubits sufficed to

cover, 'toutes les plus hautes montagnes qui sont sous les cieux,' or we are reduced to the alternative that God suspended the law whereby 'water finds its level.' If fifteen cubits of water did not submerge all the mountains, the water must have followed the inequalities of the earth—in one place being 27,000 feet high, in another not fifty feet. It is evident the water was nowhere more than fifteen cubits deep, that by this depth of water the mountains were covered, though not covered fifteen cubits deep; therefore I leave it to any reasonable man to say, if the highest mountain to be so covered could have been more than fifteen cubits high? Or was water miraculously endowed with the power of preserving an unequal level?

But do not both imply fifteen cubits of water were enough to cover all *high* hills? Lyell says astronomers have established the fact, that there has been no change in the diameter of the earth during the last two thousand years. He does not say how this is shown, or from what points the measure was made, or by whom, whether from the level of the ocean, or from the highest peaks of the Andes or Himalayas.* For my part I cannot understand it; I can comprehend that astronomers can detect whether or not there has been a change in the *weight* of the earth; as any material difference would cause some commotion, more or less, among the stars nearest to us, as was caused by that abstraction of the water from our planet, which now forms our rain-clouds, and which Professor Smyth, as I have already pointed out, has detected and indicated in his 'Stellary

* A bladder blown up with cold coal gas, if the same gas is heated, does not vary in weight, but does in diameter.

Convulsion,' and which change of weight may also be perceived in our days and seasons. As regards the universality of the Deluge, I should think the description in the Bible was enough; but when we find, as we do, remains called *prehistoric*, which have been under water, and which can only be antediluvian, all over the world, both on the surface and below the surface, showing that *all* the earth has been occupied by mankind, we are forced to acknowledge that the Deluge must have been universal, and therefore have destroyed all mankind. We find, in the middle of the Pacific, stone walls built on a small island, evidently for purposes of fortification, of a size and style which could not have been built by any population the island in its present size could have ever supported. The sole inference is, the island is part of, or a small remnant of, a former continent, or larger island. Again, in the United States we find extensive mounds, also apparently erected for the purposes of defence, constructed of earth, there being no stone in those parts. Amongst them are dug up at times, pipe-heads of baked clay, of a *decided Egyptian pattern*. Now, as the first settlers of Egypt were led by antediluvians, the connection between the two is evident. These pipe-heads are not like Mexican or Peruvian articles, which more resemble the Indian, Chinese, Japanese, or Siamese, or a *corrupt Egyptian*. On the shores of Lake Superior there are, again, copper mines, which were worked long before America was discovered; but I am not aware that any of the Indians of North America, except on the Mackenzie or Coppermine river, when the country was discovered, had any copper utensils or bronze articles,

neither did they know of these mines. These mines must have been worked by antediluvians. It will be asked, have any copper or bronze articles been found? I am not aware that there have been, neither do I expect any will be found: they would long since have been entirely decayed by oxidation. I believe in Florida some gold articles have been found, which have much puzzled people, and some of these earthen mounds are not far from the shores of the Gulf of Mexico.

'We are told of some discoveries recently made by railway surveyors on the banks of the little Colorado river in the territory of Arizona—walls of buildings still eight feet or nine feet high, irrigating canals, and ruins of a castle, of which the walls are still thirty feet high. The ruined buildings are of hewn stone. A paper recently read at a meeting of the American Association for the Advancement of Science, held in Chicago, on the "Geological Evidences of Man's Antiquity in the United States," maintained that four American races preceded the red man; first, the mould builders; second, a race in the territory now called Wisconsin; third, a warlike race in the region south of Lakes Ontario and Erie; and fourth, a religious people in Mexico. Pottery, arrow-heads, &c., have been found, the writer said, in conjunction with and beneath the mastodon and megatherium. While Dr. Hooker has been drawing public attention to a race who erect dolmens, &c., in India, Mr. Squiers has been photographing ancient dolmens in Peru. The sitting posture in which the dead were anciently placed in Mexico and elsewhere, in America, too, is interesting in connexion with the ancient *old world* races, who also buried their dead in a sitting posture.'*

* London 'Times,' September 5, 1868.

During 1867, as has been already pointed out, in Yorkshire in England stone tools have been found, and other signs of human existence, deeply buried in the soil, at such a depth as could not have been done by the local floods of rivers.

If all the world was under water, and the general level of the earth has subsided, it does not follow that every building should be thrown down; we know the columns of the temple of Jupiter Serapis have both been lowered and elevated by earthquakes, and yet stand. Besides, some parts of the earth, we don't know where, may retain the old level. Once more. Are the giant stone cities of Bashan antediluvian? At any rate, we have, I think, decided evidence of an extensive population scattered very widely over the world, at a time which may as well be called antediluvian as prehistoric.

The climate, doubtless, of such a world as I suppose the antediluvian world to have been, must have been very different from ours, and would no doubt explain why so often, in our colder climates, remains of tropical animals are found. I am not aware whether any tropical vegetable remains have been found in cold countries; probably they would decay unless they were fossilised. But Lyell says, the earth has frequently undergone changes of form. Is it possible, from the centre of gravity being changed, owing to the subsidence of the south, and the rising at the north, that the equator, so to speak, has changed its position, and that in prediluvian times the equator was nearer England, or the place which England now occupies, than at present, or that England was in a lower latitude?

If the time of the Deluge was only a year, was it needful to take into the ark all the aquatic birds? If the Deluge was only a year, why was Noah directed to build the ark of the most durable wood known, and of great buoyancy also? Any wood would last a year.

If the rain-clouds were formed after the Deluge, could the great amount of water in them have been evaporated in 200 days, or say six months and a half, even supposing there were no hills above 150 feet high? As the water covered all hills and mountains, it is not very easy to estimate the quantity of water which was removed.

But even on the supposition that the Flood lasted only a year and eleven days, how could Noah and his seven companions attend to the wants of all the animals, perform all the cleaning and other work, even if the ark did contain a year's provisions? We know the aquatic birds would require fishes for food, the carnivori would require animals, and the elephants and other large quadrupeds green food. A miracle must be acknowledged, even in the one point of keeping them in health; and yet the tale reads as if God *had forgotten Noah*, till the first 150 days had gone by. Are we not from this to infer that we are to see, as it were, what we call 'the common course of Nature?'

As I have several times said, the whole account of the Deluge is, as if there was therein, nothing miraculous, i.e. as *we* speak of miracles. No doubt all Nature is a miracle, that is, all operations of what we call Nature are the handiwork of God; but the terms used in the account of the Deluge do not bring the Deity before us until 'He remembered Noah.' We well know the

Lord *cannot forget*; but the meaning of this is—we are to understand that the supervision of the Lord was as it were for a time, not for a few days only, entirely withdrawn from the earth. It was then that the glacial era of the geologists occurred; the mass of the earth was wrapped in ice fifteen cubits thick. The only satisfactory explanation is *hybernation*, absurd as it appears. 'God shut him in.' This requires one miracle, not a succession of them daily repeated. Scott says, the door was so heavy Noah could not close it; but he must have been a very bad carpenter to make the door so heavy that four able-bodied men could not close it! And if too heavy to close, how did they manage to open it?

I have been told that the Lord sealed him up for safety against the antediluvians; but we have no account of the seal being taken off. Doubtless, though we are not told so, the ark was launched and afloat before Noah was ordered to enter it. When the Divine Creator gave him such minute directions respecting the building of the ark, it is not very likely he would have neglected to tell him to launch it.* No; the ark was launched when Noah entered it, and had doubtless been carried by the current of the river on whose bank it was built, into the ocean, before the Deluge began. Noah, therefore, was safe from any onslaught, even if the antediluvian inhabitants were not too much dismayed to think of such a thing.† What must have been their feelings to see for the first time the heavens covered over with clouds, the sun lost to sight, and to feel the

* If I order a man to build a ship, is it necessary I instruct him to *launch* it?

† The water was fifteen cubits over the land; the ark was thirty cubits deep, or drew twenty cubits when it was laden; it could not, therefore, float in fifteen cubits of water.

cold rain—and we may be certain it was colder and more stinging than any we ever feel—falling from a greater height, accompanied by severe earthquakes? Those who live in countries where these shocks are common become accustomed to them, but most persons know the sensation the first earthquake produces on the feelings.

If we consider the first chapter of Genesis, we shall see that the rain must have fallen from a much greater height than ours. The description is, the water which was removed, was removed beyond the firmament *in which* the sun was placed; *our* rain-clouds, we know, are below the sun, not seven miles above us. Only imagine the effect of rain falling (and perhaps it was not mere rain, but half *or all* hail) a distance of more than 90,000,000 miles.

The Bible says that God at the creation made the firmament to 'divide the waters which were under the firmament from the waters above the firmament.' That there may be no doubt of the meaning of the word 'firmament' the Bible adds, that 'God called it heaven,' and placed therein 'two great lights.'

As the firmament was *between* the waters above and the waters below, and the sun and moon both *in* the firmament (see Gen. i. 17) when the windows of 'heaven were opened,' to let down *the waters then above the firmament*, it follows that those waters must have fallen from a distance beyond, or on the other side of *both sun and moon.*

We suppose the sun is some 90,000,000 of miles above the earth, that it is about 850,000 miles in its diameter; there is therefore no avoiding the *fact*, that the rain of the Deluge fell from a height of more than *ninety millions of miles*, if our calculations are correct.

This, however, certainly is not the case with *our* rain.

Since the Deluge, the rain-clouds, as we well know, are spread, not only below the sun, but also beneath the moon; indeed, they do not appear to be above an extreme of ten miles above the earth, frequently below the tops of our mountains, and those not the highest.

Some mighty change must have therefore taken place in connection with the Deluge.

There is but one solution: A great mass of the Deluge water, which before was *below*, was subsequently drawn upwards by evaporation—by the laws of evaporation and specific gravity—till it found its equipoise, and formed that veil of clouds we call '*the sky*,' the height of which varies according to the density of the air which buoys it up, but its extreme altitude rarely exceeds five or six miles.

Unless we are prepared to suppose the Deity who made the world was entirely ignorant of His own work, or grossly misrepresented the order and position of what He made, I can see no escape from the previous inferences; nor can I conceive it possible for any one to deny that some mighty cataclysm must have taken place, so completely to have changed the original order of creation, which is so lucidly and minutely, though briefly, detailed in the first chapter of Genesis.

Had we no other proof of the Noachian Deluge than this formation of the rain-clouds *below* the sun and moon, this alone would suffice to prove conclusively that the Flood was *no local* inundation, the waters of which might be disposed of without doing violence to

the regular routine of what we call *nature*; and it would be easier to imagine the mass of water was greater than that which is implied by the inspired writer of the book of Genesis, than to believe a mere local flood could have produced so great a calamity and so complete a revolution.

Now let us refer to the words of Scripture connected with the Flood, both before and after. In so doing I fully believe there can be only one conclusion, that it was the intention of the Almighty to wipe out, as it were, nearly every vestige of the antediluvian world, and from the débris form a new one.

The expression used by St. Peter, as regards the old world, 'perished,' quite bears me out. Does not this mean *decayed*? May not the materials of a decayed house be in part used for erecting a new one?

In Genesis vi. 7 we have, 'And the Lord said, I will destroy man whom I have created from the face of the earth; both man and beast, and the creeping thing, and the fowls of the air;' then, verse 13, 'And behold I will destroy them *with the earth*.'

Mark these last three words.

Again, in verse 17, we have 'Behold I, even I, do bring a flood of waters upon the earth, to destroy all flesh, wherein (is) the breath of life, from under heaven; (and) every thing that (is) in the earth shall die.'

Let me here ask what a *flood*, in opposition to a *deluge*, implies? Does not a flood imply something flowing from *below*, and a deluge something from *above*? We find 'the fountains of the great deep (were) broken up' as well as 'the windows of heaven were opened,' Gen. vii. 11.

But in chapter vii. 4, we have, 'And every living substance that I have made will I destroy from off the *face* of the earth.'

Further, in same chapter, verse 21, we have, 'And all flesh died that moved upon the earth, both of fowl and of cattle, and of beast, and of every creeping thing that creepeth on the earth, and every man.'

Can anything be more conclusive? '*every man*'—and this proved by the wonderful change in our rain clouds?

There is nothing left, but either to deny the story of the Deluge entirely, or to admit it as it is described in the book of Genesis. To do the former is to reject the Bible, not only as inspired by the Lord, but as a history worthy of ordinary credit.

Again, after the exit from the ark, we have these words, in chap. viii. 11, 'Neither shall there any more be a flood to *destroy* the earth.'

Mark, 'to destroy.' How, then, can Lyell say it is the generally received opinion that the Flood, or Deluge, did not change the face of the earth?

Who are those who have expressed these opinions, and from what *facts* are these opinions derived?

The earth's form and surface *has* changed, and is, we may say, to the present day daily changing.

With respect to rain and the rainbow, the paragraphs in the Bible have much the same appearance as the jotting down in a person's diary or journal would make in our days. They look as if they were separate transactions, or things remembered at different times, sometimes reverting to previous records recorded as remembered. In this latter case, an event may have

been jotted down out of order, or twice over, but I do not see any reason, if we grant this, that we are to suppose it in every case. Now in Gen. ii. verses 4 to 7 seem separate, and appear to give a recapitulation of the thirty-one verses of the first chapter and the three first verses of the second.* The 8th to 17th relate entirely to the Garden of Eden. One of my friends says the 'mist' in the sixth verse relates to Paradise; but Paradise does not appear to have been then formed. Another says it only relates to the creation times. Is it possible that the original was, 'And every plant of the field, before it was in the earth, and every herb of the field, before it grew;† and (there was) not a man to till the ground, for the Lord God had caused it not to rain on the earth. But there went up a mist from the earth, and watered the whole face of the ground.' These are the fifth and sixth verses, with an alteration in the position of some of the words, but no change in the words themselves. Read them immediately after the fourth verse, and I think they read better.

We have apparently a time when *no man existed to till the ground*, also a declaration that a *mist* or dew supplied the moisture requisite.

Then again, in Gen. ix. 9, we have, 'I establish my covenant with you and with your seed after you;' further again, in verse 12, 'This (is) the token of the covenant which I make between me and you and every living creature that (is) with you, for *perpetual* generations; I DO set my bow in the cloud, and it

* We must bear in mind the Bible was not originally written in chapters, as ours now is printed, but in paragraphs, which do not coincide with our chapters.

† That is, God created them before there was a man to tend them.

shall be for a token of a covenant between me and the earth.'

All the expressions here are *present* and *future*, none past; there cannot, therefore, have been a rainbow before Noah left the ark, or rain or rain-clouds.

I think the natural conclusion must be, that when the Lord finished His work and pronounced it 'very good,' or perfect, that the moisture requisite for trees and plants was supplied by this 'mist,' which, in direct opposition to rain falling from above, is described as rising from the earth; that is, the heat of the day drew out the damp or moisture from the earth, this, condensed at night, fell as our dew appears to do now.*

It is no wonder if in the various copyings the Scriptures must have undergone, even with the most religious care the Hebrews are said to have taken, but lines or words may have been misplaced; and I can show that some have been; see Gen. xii. 16, where Abraham's possessions are mentioned. It is clear that 'she asses and camels' should follow 'he asses;' it would then read, 'he asses and she asses, and camels, and men servants and maid servants.' Again, in Gen. xiii. 10, 'As thou comest unto Zoar' should follow the words 'his eyes;' it will then read, 'And Lot lifted up his eyes, as thou comest unto Zoar, and beheld all the plain of Jordan,' &c., &c. Zoar was where Lot took refuge, and is described as if *above* or looking down upon the plain; it has no kind of connection with

* The first chapter of Genesis describes the creation as complete when man was made; in the second chapter we are told the earth was moistened by a 'dew' or mist; if *rain* then existed would it not be mentioned?

Egypt, as our authorised version makes it appear. How the error took place no one can say, but it looks very much as if *Zoan* in Egypt had been confounded with *Zoar* in Canaan.

But I am prepared to go even farther, and show that *whole* chapters are misplaced. Mind, I change nothing but position in my alterations. The fourteenth chapter leaves Abraham in the north-east of Canaan, after the defeat of the Assyrians; the three next do not mention any locality; the eighteenth, we find him in Mamre, in the south-east of Canaan, from which he could overlook Sodom and Gomorrah. The nineteenth pertains entirely to the destruction of the cities. The twentieth begins, 'And Abraham journeyed from thence toward the south country.' Now, if Abraham journeyed from Mamre 'toward the south country,' he would go into Edom or Arabia, not to 'Gerar,' from whence he removed to Mamre.

But if we place the twentieth chapter after the fourteenth all comes in regular order; the fourteenth leaving him in the north-east, journeying south as described in the twentieth, we shall have him come naturally to Kadesh, Shur, and Gerar, from whence he moved after the transanctions mentioned with Abi-melech, to Mamre. It appears to me also, the twenty-second and following verses of the twenty-first chapter should be added to the twentieth. The order of the chapters would then be, xiv. xx. and thirteen verses of xxi. xv. xvi. xvii. xviii. xix. xxi.

Isaac was born when Abraham was aged one hundred years, and in chapter seventeen, verse twenty-four, we are told he was ninety-nine.

These changes in position will put all the events into regular order—the sojourn in Gerar, the return to Mamre, from whence was seen the destruction of the 'cities of the plain,' and where the angel's visit was received, Isaac's birth, and Ishmael's departure.

Suppose these chapters are a part of a journal handed down by Abraham, if we consider the wandering life he led, can we be surprised if his notes may have been somewhat misarranged?

And let us remember, probably the first of the transcribers, or the original compiler, might not have been so scrupulously careful as the Hebrews became in later times. In the LXX the word 'mist' is described as a 'fountain;' this, however, evidently shows they understood there was *no rain*, for they could not make this fountain into the river which ran out of Eden.

Then again, as regards the rainbow, in the ten verses in Gen. ix. in which it is described, it is spoken of as a sign, seal, or *token* of the covenant then made with Noah (see verses 11 and 12); *token* is repeated three times; this was the first covenant made after the Deluge, and it was *sealed* by an everlasting sign or token, set then in the heaven, which had never been seen before. 'And it shall come to pass, when I bring a cloud over the earth (as if clouds were not common), that the bow shall be seen in the cloud;' and in verse 13, 'I *do* set my bow in the cloud.' Surely all this implies, as clearly as words can do, that before the Deluge there was no cloud so dense or full of moisture as to form a prism for the rays of the sun.* God says

* Moisture in shape of a mist, as seen in the mist of a waterfall, or even in the spray of a wave, will form a prism sufficient to show a rainbow.

'*I do set*;' at that very time it appeared for the first time. When a man says *I do* a thing, does it mean he did it at some previous time? Why, anyone will say I am foolish to make such an observation; if so, let such persons acknowledge that the rainbow was first seen after the Deluge; and as rain forms it, it stands to reason it must have been seen, had it rained during the 1,656 years of prediluvian times. In Gen. i. 6, the waters are divided. In the seventh the firmament, heaven, or our sky, is made between the waters. In the fourteenth, the lights are placed or appear *in* the firmament below the upper waters. Now we know our present rain-clouds are *below the sun*, moon, and stars. Surely, is not this positive evidence that some change has taken place? The writer of the article on Noah, in Smith's 'Bible Dictionary,' says then the laws of nature must have been changed. Not at all; the sun then, as now, evaporated moisture from the earth, which being condensed became dew, or *mist*. In all very dry countries, the dew is of an extent we in our climates cannot comprehend. Absence of dew is an invariable sign of rain, even in the variable climates.

But it will be said, This does not agree with the description in Gen. ii. It appears to me to agree perfectly; in the day the moisture is absorbed into the air, when returned at night as dew to 'water the earth.'

Now, as I fancy I have proved there were no rain-clouds before the Deluge, how were they formed? By a separate creation, or by the so-called natural effect of the absorption of the water by the sun? Remember, when the earth and water were first separated there was *no sun*; but would not the rays of the

sun naturally create evaporation after the time of the Deluge?

If I write folly, I hope wiser men will be patient with me; if I throw my 'cosas' abroad to be scrambled for, I hope some man may find a sound nut and turn it to good use.

If before the Deluge our rain-clouds did not exist, was the atmosphere the same as now? I should suppose not; I should say it was rarer or lighter. If so, would the rays of the sun be felt as much as now? Perhaps if there was more moisture in it—yes.

It is not so when we go up high mountains; we find snow on high mountains all the year round, in latitudes where it will not lay any time in the lowlands at the foot of the mountains, even in winter, not in valleys but on a plain.

Again, I have shown that the earth is lighter and our seasons are irregular. This was not the case when God made the world and pronounced it 'very good,' or *perfect*; then no doubt the days and nights were of equal length, the sun always on the equator and the southern hemisphere, not as now, condemned to eight days shorter seasons than the northern—the moon always full.*

I think a careful consideration of Gen. viii. 22, will sustain me in this assertion. This verse implies that the seasons were *then* first created; this is corroborated by their inequality, which could not have existed in the 'good,' *perfect*, primeval times. Day and night

* In Gen. i. the 'lights' are made, one to rule the day, one to rule the night; at present, during the moon's age, how many nights is she either invisible or overpowered by the sun's rays? She no longer rules the night.

had been always known, but before, there were no vicissitudes of seasons, cold and heat; from the sun being always on the equator. But it will be said, 'We are told in Gen. i. the heavenly lights were set for *seasons* as well as for "lights."' Granted they were set then for that object; although seasons were to be created at a subsequent time, those words were not written *then*, when the lights were set, not until after the Deluge, when they became of use by the seasons being created. The Eternal Lord creates things many centuries beforehand, to be found when they shall be wanted; as I well remember a merchant saying of the gold discoveries of California and Australia, 'What a wonderful provision in the Creator to prepare all this gold, to be discovered at the time when it was most required!'

From the words of Gen. viii. 22, it is evident our seasons were then created: they are a part of the covenant of God, made with Noah; this is clear proof they did not exist before the Deluge; if they were in existence before, how could God then declare their routine? Fancy one man saying to another, 'You have behaved well, therefore you shall have the usual meals you have always had in my service.' A promise or covenant made implies something entirely new.

After the Flood, the whole economy of Nature, or the Earth, was wholly changed; rain and mountains, the change in position of the centre of gravity, caused by elevation and subsidence, evident by the different proportion of land and water in the north and south hemispheres, causing the sun to wander from tropic to tropic, and thus making the variations in days and

seasons, show conclusively, before the Flood the days and nights must have been equal. There could be no succession of seasons, but a perpetual spring, summer, autumn, as now exists within ten degrees of the Equator, but without the rain.

Was the terrestrial heat of the antediluvian world partly radiated from the earth? We know that vegetation cannot go on without heat; but it commenced before the sun was seen, and the same word used as light in Gen. i. is used by Job for electricity, and by Isaiah for heat from a fire.

In this case, may not the temperature of the earth now be different from what it was in the antediluvian age, or less variable? If so, will this explain the change which has come over the products of parts of the earth? Or supposing, as I have suggested, a uniform climate and equal day and night, are the remains of tropical animals found in high latitudes satisfactorily explained? We know hyænas must at one time have lived in England, and could not do so now, as far as temperature is concerned. Again, will not this change in climate explain why some animals have diminished in size or died out—the large oxen and deer of Europe, the dodo and large wingless birds of the southern hemisphere, which are now extinct. I am not aware if remains of extinct species of large lions or tigers have been found; the decrease in size appears to be confined entirely to the herbivorous animals, which would be more likely to be affected by such a change of climate than the carnivori; the latter might be killed out, but not dwarfed.

We know well that the Lord works by what we call

means. He said before the Deluge, man's life should be curtailed? Is it not probable that during the Deluge, or immediately afterwards, some change took place in the face of the earth, which caused such a change of climate as would reduce life?—namely, mountains raised and continents separated.

We find by Revelation, that at once, after the Deluge, man's life was curtailed *one-half.* Again, we find the same thing after the dispersion; and what would aid the dispersion or *separation* of tribes more than the elevation of a mountain chain some thousands of feet high? We know from Falconer's 'Remains' such has happened in Asia, since the 'glacial era,' or the end of the tertiary epoch.

Cannot we see another like change when Sodom and Gomorrah were destroyed, the Dead Sea, and probably the Caspian and the other salt lakes of Asia created?

Man's life *then* seems to have been reduced to what may be called its present *maximum.*

But what effect would these changes have on animals? Would they not in some cases destroy them, in others *dwarf* them? And cannot we see that such *may* have been the case?

May not some of our animals be dwarfs of the old fossil remains, as the Lap or the Boshman is a dwarf from the original form and stature of *Adam*?

I must say, I think in Gen. vii. 19, 20, we have a distinct declaration there were not before the Deluge any hills or mountains attaining to a height of more than fifteen cubits 'above sea level,' or mean high water.

Verse 19 is, 'And the waters prevailed exceedingly

upon the earth; and all the high hills that (were) under the whole heaven, were covered.'

This does not imply were covered fifteen cubits.

Verse 20. 'Fifteen cubits upward did the waters prevail; and the mountains were covered.' I have before pointed out, perhaps the Hebrew may bear a different translation.

Can anything be more plain or distinct, when the waters had risen or prevailed fifteen cubits, then the mountains were covered?

But I will now return to my theory of Noah's hybernation. I find in Bryant's 'Antient Mythology,' third edition, vol. iii. p. 167 and following, he says, 'In respect of Typhon, it must be confessed that the history given of him is attended with some obscurity. The Grecians have comprehended' (or perhaps he ought to say confounded) 'several characters under one term, which the Egyptians undoubtedly distinguished.'

This, we know, is a common case with tradition. 'The term was used as a title as well as a name, and several of those personages which had relation to the Deluge, were styled Typhonian. The real Deity, by whom the Deluge was brought upon the earth, had the appellation of Typhonian.' In a note he says, 'Plutarch owns that the Egyptians in some instances esteemed Typhon to be no other than the chief Deity, Helios.—*Isis et Osiris*, p. 372.

We can trace Typhon to this day in the common word in the East for a hurricane or cyclone, viz., *Typhoone*, derived probably from the Persian *Tuffaun*, or perhaps the Chinese Tei Pini. But most distinctly

our 'God of Storms' is to be found under this Egyptian term, correctly named.

The Egyptians relate that Typhon made or caused to be made an ark of curious workmanship for the body of Osiris, and that Osiris was enclosed in it. Plutarch's words may be, Bryant says, translated 'caused the body of Osiris to lie down to rest (or sleep)'—'Εμβάντα τὸν Ὄσιριν κατακλιθῆναι.—*Isis et Osiris*, p. 356.*

Bryant again says, p. 168: 'The stay in the ark was esteemed a state of death and regeneration.'—*Isis et Osiris*, p. 358. We know the ancient Egyptians styled deceased persons 'Osirian,' a term which has been generally assumed to mean, *justified*; but I beg to suggest whether it would not be more correctly interpreted to imply, 'who has risen from the grave, or who is living a second life?' And on page 169, he says, 'And Plutarch accordingly mentions τὸν Ὄσιριν ἐξ ᾅδου παραγενόμενον, *the return of Osiris from Hades*, after he had been enclosed for a long season ἐν λάρναξι, *in an ark*, and in a state of death.'

Now it will be said, 'tradition only;' but what is the origin of history but tradition, and how are we to write history if we throw away all tradition, and assume there is no grain of truth in it? Lactantius says, 'Non res ipsas gestas finxerunt poetæ, sed rebus gestis addiderunt quendam colorem.' Who are these poetæ? People who relate history in poetry, from which history springs? Herodotus says, the *local traditions* at Sparta, about the Dorian settlements, 'agreed with no poet.'

It is for science to eliminate true history from per-

* In opposition to laying down to eat, I believe it may imply *to overthrow.*

verted tradition; tradition and written history alike, aim at preserving truth and recording events as they happened; but as it is impossible for a man to relate a story exactly as he heard it, we must find tradition deviate from fact.

Again, on page 181 Bryant says, 'I cannot conclude without again introducing that memorable passage in Plutarch concerning Osiris going into the ark. He says it was to avoid the fury of Typhon;' or in other words, to escape a hurricane; 'and that it happened on the seventeenth day of the month of Athyr, when the sun was in Scorpio.'—*Isis et Osiris*, p. 356.

The month Athyr was the *second month* of the Egyptian year; the date, therefore, corresponds exactly with Genesis, and also agrees with Professor Smyth, who says, vol. iii., p. 276, that 'Scorpio' was one of the dominant stars when the Deluge came on.

Will any one pretend to say there is no connection here between the history related in the Bible, astronomy, and this old Egyptian story, no doubt somewhat perverted by both Egyptian and Greek? If Typhon wished to destroy Osiris, why did he make an ark for him as a means of escape? and does it not show he was to escape from a watery grave? But it is evident it was the wish of Typhon, the God of Storms, that Osiris should be preserved. Bryant concludes thus: 'Hence I think there can be no doubt but in this history of Osiris we have a relation of the Patriarch and the Deluge.' And I think we must agree with him.

Again, on page 247 we have, 'But the most pleasing emblem amongst the Egyptians was exhibited under the character of Psyche (Ψυχή). This was originally no other than the aurelia or butterfly. The aurelia, after

its first stage as an eureca, or worm, lies for a season in a manner dead, and is enclosed in a sort of coffin; but at the return of spring it bursts its bonds and comes out with new life. The Egyptians thought this a very proper picture of the soul of man, and of the immortality to which it aspired. But they made it more particularly an emblem of Osiris, who having been confined in an ark or a coffin, and in a state of death, at last quitted his prison and enjoyed a renewal of life. —*Isis et Osiris*, p. 364.

It is perfectly plain, therefore, that my idea of Noah, and all in the ark with him, being in a trance, coma, or state of hybernation is a good many years old.

On page 247 Bryant gives an engraving, or a plate of six medals, described as 'chrysalis, aurelia, scarabæus, musca, Psyches emblemata, ex Gorlæo et Kircheo desumpta;' one of which is almost identical with the double crest of the Pharaohs, and shows evidently its origin. I refer to 'the reed and the fly,'* † thought to indicate Upper and Lower Egypt, which I have already pointed out could not be the correct interpretation, but supposed it might imply the two Egypts, Hither and Thither; but this I now think is not the proper solution, but the meaning is, man's two lives, the present and future, the broken reed indicating the present, the butterfly our resurrection.

The lower figure is, I imagine, intended to represent the ark under the form of a crescent or young moon.

Side by side with Bryant's plate I have placed the 'double crest' of the Pharaohs. It will be seen there *is*

* Is the crest of the Pharaohs. † Is the plate given by Bryant.

a difference; in the one, the 'fly and reed' rest on half circle, in the other they are detached; but is small difference sufficient to say the origin is not same?

We may as well remember, that Bryant wrote bef Egypt and its wonders had been 'opened up.'

Noah was ordered to make a 'window in the ar and to finish it above to the height of a cubit. I do n suppose this was to be a window like one of o windows, or to have been the window he is describ as looking out of (I believe the original is plural those who have been in the East know the main objec of windows are for the purpose of ventilation: th without doubt, was the intention of the *window* No was directed to make, and which was probably a latti running the whole length of the roof of the ark, b finished above with the roof. Similar ventilating spac may be often seen at this day in sheds for animal Thus would be supplied that amount of ventilatic which all creatures hybernating require. If a mirac is to be called in, the simpler we make it the bette and it is also better to have one simple miracle, tha to have it repeated every day for 371 days. I a not writing for those who deny the Bible, or those wh consider the relations of Moses to be mere myths. B I would have those who so much change the meani of Scriptural words, to consider where such a cour must end. There are parts where *no* change can allowed; other parts, purely historical, where words a used exactly as we use them ourselves at this da For example, the expressions of the sun rising a setting, and running its course; the relation that

the time of the Josephian famine 'all nations' came to buy corn in Egypt. It cannot be proved they did not, as we do not know how much of the world was then peopled. The words mean, 'all nations then known.' But let it pass. Would any one cavil at an expression by a writer in a Paris newspaper, who said, 'People from every nation visited the Exhibition of 1867?' Surely they would not say, 'What a falsehood! there were neither Esquimaux, Ashantees, or Terra del Fuegans there.' But this is the manner in which the Reverend Divine has acted in writing the article on Noah, in Smith's 'Bible Dictionary,' when he compares the expression I have alluded to respecting the famine, with the declaration of the Lord, that He will destroy all He had made on the face of the earth. Surely a writer of such eminence should be able to discriminate a little between God's words and man's. To me he is as bad as Dr. Colenso. Again, the same writer says, the fish in rivers would be destroyed by the influx of sea-water. Perhaps the antediluvian ocean was not salt. I am not going to argue the question; great differences do now exist between our world in its present state, from what it was in former times. We are told the 'waters were divided,' part being removed to heaven and part left below; but then it will be said, if the ocean once was fresh, now being salt, the change would have killed all the fish in it. Not if the change was a very gradual one; in that case the fish would become accustomed to it. We know there are many kinds of fish who regularly spend a part of every year in each kind of water. Do not young salmon live a year or two years in the fresh water where born, and then go, of their instinct, to the

salt? He also refers to the Evangelist saying our Saviour's birth took place about the time when the Roman emperor issued his edict that *all* the world should be taxed. Poor Evangelist! little did he expect, when he was relating what was to be a blessing to all nations, his history would be thus scanned by the microscopic brain of a Lilliputian critic. And because of these expressions in the Bible's purely historical narrative, the first of which he cannot prove, is not true, and the second is *perfectly true*—for the Emperor *did* issue such an edict, and the error was *his* and not the Evangelist's,—he assumes the right to say, 'The Almighty Jehovah did not mean what He said, when He said, I will destroy all I have created on the earth.' A poor specimen this, of a clergyman of the Established Church of Protestant England! I wonder if he has ever read so far in his Bible as to get through the last chapter; if so, I should advise him to consider whether the eighteenth and nineteenth verses apply only to the book of Revelation. Surely this is an instance of one 'straining at a gnat and swallowing a camel.' Should my remarks ever meet his eye, I hope he will not be offended; I mean nothing personal; but he reminds me very strongly of a large number of people who, like St. Paul, now 'see through a glass darkly,' only not in the way the apostle did. I have no doubt this gentleman, and many others who think with him, will deny me the right to change the position of the few words which I have suggested in verses ten and eleven of Genesis xi. I shall again refer to this point.

Bryant, at page 62, says, 'The antients described the ark as the *ναῦς ἀμφίπρυμνος*, like a lunette; it was in consequence of it called *Μὴν* and *Σελήνη*, which signify

a moon.' Again, at page 63: 'Here too (at Magnesia), were some particular rites observed in honour of the same Deity, whom they distinguished by a significant appellation and called Μὴν Ἀρκαιος' (Strabo, l. 12, p. 864).

Can this be the origin of the name given to the first king of Egypt, viz. Menes, Mên or Meen? If he was our Biblical Ham, may he not have been confounded with his father? (at the same time he was himself an Arkite.) To him, doubtless, the title was in the first place applied. At p. 62, Bryant gives a plate, xiv., in which are engraved four medals of 'Deus Lunus Carrhenorum,' the city of Carrhæ, in each of which we have a crescent of the moon represented, in one the crescent only, with a star above, ; in another the crescent is on an altar, a star over and a man's head.

Can there here be any allusion to that *star* for whose expected return the Pyramid passages appear to have been prepared?

I have expressed very strong objections to the meaning of words in Scripture being changed, or, I may say, perverted, and I do for this reason: when such a licence is granted, no verse, chapter, or book is safe from being in like manner perverted or struck out entirely. It will be said I claim a similar licence in moving the position of words. This I deny. I change no word in the least degree; but I say it is but natural to suppose, when we consider how often Scripture must have been transcribed, how it was first written, without stops or accents of any kind, and on any kind of material. If Mahomet wrote the Koran on even 'blade bones of sheep' what kind of material may Abraham or Isaac have used? Skins or papyrus are superior to bones.

Again, let us remember how the original language

has been enlarged, improved, and modified since the first copy was made. These reflections must tell us words or verses may have been misplaced, whilst the 'spirit' remains the same.

It perhaps will be said, 'You have no right to so criticise others, and claim to put a new meaning of your own on words of Scripture.' But what new meaning do I put on words?

As regards the words, 'The Lord shut him in,' have they ever attracted much notice? A friend of mine, a clergyman of the Church of England, first drew my attention to them, by saying, 'he thought the Lord stayed their stomachs.' He never supposed for a moment the days might be years, though in Gen. ii. the six days of creation are described as *one*; and in the case of Adam we are told, 'In the *day* thou eatest thereof, thou shalt surely die.' As Adam lived to be 930, perhaps *his day* was his life, or 1,000 years.

Daniel speaks of 70 weeks, or 490 days. We know this implied years, as that prophecy is complete. The same prophet speaks of 2,300 days, when the sanctuary shall be cleansed.*

If we apply this to Alexander's invasion, circa B.C. 334, it will land us in A.D. 1960 or a century hence; if to the destruction of the Temple, in A.D. 70; when idolatrous standards were exhibited in the Temple area, it will be 2370 A.D.; if to the building of the Turkish mosque a much later period. Every person will in such cases select his own date of departure; but no one can say that the word *day* in Scripture does invariably imply twenty-four hours of sixty minutes each.

What is 'the acceptable year of our Lord?'

* The word for *days* in Daniel, is the same as in Gen. vii. and viii.

CHAPTER X.

VARIOUS COSAS.

'GATHER up the fragments, that nothing be lost,' is not only applicable to family economy, but to the study of the Bible, as also to that of history, both chronologically and generally.

Bishop Butler says—and I have kept these words in mind in my 'cosas,' with what effect I leave to my reader to judge,—'If the whole scheme of Scripture ever comes to be understood, before the *restitution of all things*, and without miraculous interposition, it must be . . . by particular persons attending to, comparing, and pursuing intimations scattered up and down it, which are overlooked and disregarded by the generality of the world (readers) . . . . and possibly it might be intended that events, as they come to pass, should open up and ascertain the meaning of several parts of Scripture.'

I do not intend to insinuate that what I have written will in any way be the mode of explaining the meaning of Scripture; I only aim at showing there is more trust to be placed in Scripture than in human theories, when the two do not agree.

Bunsen, with wonderful labour, brings forward many authorities to support the view he takes, in opposition

to Scripture; only one, however, Manetho, an Egyptian, in him he puts no confidence. Why does he reject Africanus, also an Egyptian priest, and Eratosthenes, the librarian to the king of Egypt? Is not such a man as trustworthy as a person in Dr. Lepsius' position? Both, being men, are liable to error.

But when carefully considered, we find Herodotus, Eratosthenes, Africanus, Plutarch, Strabo, and also Arabian writers, who followed the Romans in Egypt, all corroborating the Bible, though never in any way alluding to it; finally, two well-known astronomers, fixing the date of the Great Pyramid. I have explained how, from the Bible and the corrected list of Eratosthenes, I place the entry of the sons of Ham into Egypt in 2281 B.C.

The Abou Hormeis papyrus places it 946 years before the first year of Alexander the Great, but it is evident 1,000 have been lost in copyings. Now, when did Alexander enter Egypt? We have it stated in 320, 325, and 336 B.C. by different writers, the last, Bell;* who, a writer of authority, would thus place the entry of the sons of Ham in 2282 B.C., or just one year before me. Can we suppose that all these coincidences are accidental,—the Bible, Astronomy, old manuscripts, all agreeing, are we to suppose it a mere cast of the dice?

I have no doubt in my own mind what the verdict will be when the gloss of novelty is worn away, and truth has had time to assert its right. Posterity will decide positively and emphatically that the Bible, the word of Deity, when clearly understood, is worthy of entire confidence and trust.

* Alexandria is *said* to have been founded B.C. 332.

For my part, I am childish enough to require no confirmation of the Bible, which some describe as not trustworthy in its chronology, being in this, merely composed at random of forties and decimals.

Let us examine it a little. We are told that Adam,* when 130, had a third son born, and that he died aged 930; that at 105, Seth, Adam's third son, had again a son, Enos, and died aged 912; in like manner the son of Enos, Cainan, was born when his father was aged 90: his father's age at death was 905; that at 70, Cainan had a son, Mehalaleel, and died at 910; that at 65, Mehalaleel had a son, Jared, and lived to 895; at 162, Jared had a son, Enoch, and died at 962; at 65, Enoch had a son, Methusaleh, and died at 365; at 187, Methusaleh had a son, Lamech, and died aged 969; and at 182, Lamech had a son, Noah, and died at 777.

Now here we have neither a list of decimals nor of forties. We have two births at 65, one each at 70, 90, 105, 130, 162, 182, 187; and except Adam and Lamech, the three longest livers are those whose sons are born latest; and no two are recorded to have died at the same age.

So much for the antediluvians. Now let us look at those who are recorded in Gen. xi. At 35, Arphaxad had a son, and died aged 438; at 30, Salah had a son, and died at 433; at 34, Eber had a son, and died at 464; at 30, Peleg had a son, and died at 239; at 32, Reu had a son, and died at 239; at 30, Serug had a son, and died at 230; at 29, Nahor had a son, and died at 148. Leaving out Shem and Terah, we have

* Adam implies woman's creation; man lived some time with no companion.

seven persons; the sons of three are born at 30, the other four at 29, 32, 34, 35 respectively; whilst two only die at the same age, their ages varying from 148 to 464, and only one ending in a decimal.

But to pursue the same course to the death of Moses, which I imagine is late enough, Abraham dies at 175; Isaac, 180; Jacob, 147; Joseph, 110; Levi, 137; Kohath, 133; Amran, 137; Moses, 120. We have here eight, two at 137, the rest at 110, 120, 133, 147, 175, 180, respectively. Thus we have the deaths of twenty-three persons, only ten of which are decimals, and only one divisible by forty.

Amongst the Judges we may have a few instances which look like forties, but I think I have shown that too much has been made of the few we find.

As regards ages of persons in families, my father was born when his father was thirty, my father was forty when I was born, and I was more than two-thirds through my thirtieth year when my son was born, and when I should have been called a man of thirty years old. Again, my father, though not born in the same A.D. as the first Napoleon, was born in the same current twelve months, and I again was born in the very same current year as the present Emperor of the French. I hope after this people may be disposed to speak less of the book of Genesis as a chronological myth.

If Biblical commentators and Egyptologists had kept in mind the text I quote, they would have avoided some errors respecting transactions in Egypt. The first make Amran marry his *aunt*; it is true in Exodus vi. we are told Jochabed was sister to Kohath, but in Exodus ii. verse 1, we find, 'that a man of the tribe of

Levi took a daughter of Levi to wife.' Are not all Hebrews to this day beni Israel, *children of Israel*? Is not every Campbell or Cameron brother or sister to every other one of the clan? The words brother and sister, without doubt, at first applied to any lateral relative. I say lateral, in opposition to direct, either in the ascending or descending scale. As language became more copious other terms were introduced to explain relationship, while the original word was kept to indicate brother or sister. In Gen. xxix. 12, we find Jacob tells Rachel he is her father's brother; in verse 15 Laban himself applies this term to Jacob.

Canon Trevor, too, in 'Sunday at Home,' commits the same error; he has resided in India, and there must have learnt that in Eastern life *all* of one tribe or village are spoken of as if one and the same family.

In the same magazine, Canon Trevor speaks as if Rachel had not died on the way to Eprath, Gen. xxv. 19, because when Joseph had his second dream, Gen. xxxvii. 10, Jacob says, 'Is thy mother to bow down to thee?' therefore, Rachel could not be dead. The reverend gentleman does not say what term Jacob should have used if he implied Leah. The English Prayer Book says, 'A man may not marry his grandmother.' Does not this mean the widow of his grandfather? Is not a step-mother, in common conversation, often spoken of as a mother? and would a father, in speaking to a son, ever use the term 'step-mother?'

I have pointed out that some of the chapters in Genesis appear to me to have become misplaced, though others may not be. I cannot, however, see anything of this kind in the three chapters xxxv., xxxvi., xxxvii.;

they appear in perfect order, and Canon Trevor does not hint at anything of the kind. Rachel's death is recorded in chap. xxxv. 19, before the arrival at Mamre; and the meeting with Isaac in chap. xxxvii. 6, 7; after Isaac's death, Esau goes to Mount Seir; the xxxviith., in which the dreams are related, and which probably indicate two years, opens with Jacob residing at Mamre, where his father had lived.

If Egyptologists had borne in mind the paucity of our information respecting the domestic life of ancient Egyptians, and remembered Abraham's (half) sister was his wife, they would never have fallen into the error of supposing that Egyptian kings were guilty of incest, because they 'led a sister to wife.' Due allowance should be made for poverty of language in primitive times, as well as for the great difficulty of expressing ideas in hieroglyphics. The art of printing gives wonderful scope to the expression of our thoughts—so much so, indeed, that now we can express in words the minutest shades. But it was far otherwise in primitive Egypt; those recorders did not have at their disposal our copious vocabularies, but only a small catalogue of objects, by means of which they could record events.

The utmost they could do would be to convey a very concise, rough, general outline, as a painter sketches in his first idea of a picture, which we must not scrutinise too severely.

Had Egyptologists observed that in the Bible 'the Princes of Pharaoh' are spoken of, I do not think the idea of 'contemporaneous dynasties' would ever have been thought of.

A clergyman of the English Church, said to me, 'I

cannot argue with a man who brings the Bible to sustain his scientific ideas.' Does he differ from the Pope? He says, 'Shun Science, it will make you read the Bible.'

This is not how Eratosthenes acted; he did, no doubt, believe the truth of the Biblical chronology as he knew it, without perhaps troubling himself any further in the matter.

For my own part, I can see no reasons, lingual, geological, or numerical, which make it needful to extend or doubt the chronology of the Bible, according to the authorised version read correctly—not after Usher's marginal chronology.

As regards language, look at the very great changes going on in the English language in every respect, in the United States of America. If it were not for writing, printing, and steam vessels, what would it come to in four or five hundred years? In Gen. xxxi. 46, we have an instance how, in less than 250 years, two distinct languages grew up. I say 250 years, that being more than the time between Abraham's leaving Ur (if we suppose him to have been thirty when Terah migrated), to the time when Jacob and Laban set up the stone of witness, which each is reported as calling by a different title.

Then numerically, if anyone will calculate what *six* doubled thirty times will amount to, which is in other words allowing the descendants of Noah to have increased at the low rate of doubling every *one hundred and fifty* years only, since the Deluge, he will find it amount to over 6,400 millions of people, the usual estimate for the population of the whole world being, I believe, 1,200 to 1,300 millions; some say 2,000 millions.

The author of a work styled, 'Man, when, whence, whither,' at p. 112 says, 'Indeed, whether we appeal to written history or to monumental evidence, we find all over South Asia and South Europe different phases of civilisation, different languages, styles of architecture, forms of religious worship, all of which must have taken thousands of years for their elaboration, even at the existing rates of progress.'

I should suppose that what is generally called *history* would have explained the two points of religion and architecture. But cannot the writer see the influence of the Bible during the last 300 years, in spreading civilisation? Compare the Spain and England of 1560 with the Spain and England of 1860, or compare North America with South America, and say what but the universal spread or knowledge of the Bible amongst the one people, and the utter want of the knowledge of it amongst the other, can be the reason of the difference. Mexico bids fair in another 400 years, if not sooner, to be worse than in the times of Montezuma.

Page 140, the author asks, 'Whence are we?' He has been told, but appears dissatisfied.

Science is not satisfied with being told she must discover for herself. 'The Thibetians believe mankind to be descended from an ape;' it seems to me some Anglo-Saxons have the same belief. 'And in Borneo the myth is, that man was created from the dust of the earth, and woman was formed from the great toe of the man.' And referring to the Biblical account of man's creation he says, 'but, however curious the fable, or mysterious the myth, none of them is of the least avail to science, and reason is driven in the long-run either

to abide by the belief in a direct creation act, or to seek for the solution of the problem of a derivative descent.'

'Guess I growed,' says Topsy.

We have an account of a direct 'creative act;' why is not reason satisfied? All nature corroborates it.

Some people say, and perhaps believe, North American pine will breed 'bed bugs;' they might just as well say rattlesnakes or buffaloes. Are we *derived* from bed-bugs, and by what process? I wish some of these 'developists' would show us what they can *develop*; let them develop a bed-bug into a black beetle, or turn grass into wheat. Why can they not develop the common lifting-pump into a power to raise water one hundred feet? When any of these things are done, it will be time for them to cry 'Hear us.'

Again, p. 157, he says, 'Our seventh proposition is, that man's origin, being placed far beyond the limits of his own experience, resolves itself into a question of natural history research and philosophical inference.' One would suppose philosophical inference would inform man that the records of natural history describe man as born of mankind, and not of birds or beasts, or beasts of birds, and *vice versâ*; therefore the research into natural history would lead any one but Sir Boyle Roach, or one of his descendants, to say, we must have been at first created separate and distinct. A 'ben'* Roach may say, 'Shure and I don't rimimber me berth; may be I am the phool of a hippopotamus.'

Breeders of animals and birds often find the young ones resume the likeness of an ancestor. This is a fearful thought—the possibility of having a young progeny of bugs or beetles!

* Ben. Arabic—descendant from.

No one can help remarking how the natives
America and Australia die out before Europeans. C
we see in this a fulfilment of Noah's words, 'God sh
enlarge Japhet, and he shall dwell in the tents of Shem
My old Bible of 1608 has, 'God (*shall*) persua
Japhet that he may dwell in the tents of Shem.' P
suade, no doubt implies convert to the true fai
The nations I have mentioned are descended fr
Shem; they die out because they will not or cann
work, dig, or labour, thus refusing civilisation, whi
the Hindoos, Malays, Burmese, Chinese, Japanese, &
descended from Magog, accept.

God said to Adam, 'Subdue the earth,' or in oth
words, *labour—before the fall.*

Allowing that some 600 years elapsed from the fi
emigration from Egypt to Nubia, it would be amp
time to convert a *red-skin*, our original colour, into t
dark hue of a negro. Neither let it be forgotten oth
things aided this change of colour—a swampy count
a tropical climate, a life without the shelter of hou
or the protection which clothing affords against wh
Shakespeare calls, 'the skyey influences.'

The use of houses and clothing protect the skin fr
bleaching or turning darker; thus, the red man, in
cold climate, without much clothing, bleaches, whilst
the tropics he turns black. House and clothing ha
preserved his colour to the American slave for ho
long? 150 years—no great fraction of 3,500 or 4,0
years!

Go to America, and see how the descendants of t
original Normans in Lower Canada differ from the
French cousins, and the descendants of the English

New England from their cousins—this, too, only in about 300 years, and in much the same climate; in neither case has there been much foreign blood mixed with the original stock.

Geologically we find it the same. I have attempted to point out that all our mountains may have been raised in 4,500 years. Scrope says, igneous rocks are being formed now by plutonic or volcanic force; there, then, is no occasion to carry back the primary formation of geologists to some unknown million of years.

It surprises me that geologists have never, so far as I am aware, paid much attention to the wonderful change caused by volcanic action in the plain of the Jordan, within historic times. Did the river once empty itself into the Gulf of Akaba? Is it because they think *nothing* in the road of science is to be gained by attention to the Bible? Have they forgotten, or never read, what Erasmus said?—'Science can never truly conflict with Christianity.'

But perhaps I should not be too exacting in viewing what science makes people write. I suppose the author of 'The Twin Records of Creation; or, Geology and Genesis,' desires to make the Bible and science appear to agree; but his whole aim is evident, even from his title-page, that the Bible is to be read as science dictates. I think it would have been better for him to have said, 'Genesis and Geology,' the former being the elder of the twain. But the real twin records of creation are 'Genesis and Astronomy.' There can be no great mistake in Astronomy; there may be a dozen different theories in Geology, and all wrong. Mistakes may be made in Astronomy, but they can only be those of calculation or observation.

The author of this little work, to which I have referred at p. 17, says, 'A crust (of the earth), which there is reason to believe varies from four to eight hundred miles in thickness.' Does he mean four miles, or four hundred? His next page does not explain, when he says, 'Should this increase (of internal heat) continue—and it probably does—the hardest rock with which we are familiar would be in a state of fusion at the depth of twenty-four miles.' How, then, can there be a crust of a greater thickness? I, no geologist, enquire.

On the same page, 18, he says, 'During the Cambrian era (the afternoon of the first day), waters surrounded the earth, sweeping in tremendous and unbroken billows from pole to pole.' Am I wrong in supposing these 'tremendous billows' to have been caused by wind? He does not say they were not; yet, on p. 33 he says, 'For as there was no atmosphere at or during this particular era, there could therefore be no wind.' Also, on p. 98 we have, 'The first verse in the Mosaic record of creation states, that "In the beginning God created the heavens and the earth." Now, it is here quite obvious that the heavens here indicated cannot be the particular place of residence of the Almighty.' Surely it is surprising to find a writer who sets himself up as a sincere believer in the Bible to write as if the wonderful Jehovah was like a man—one who lived in a 'particular place.' Here is a sad result of an endeavour to bring the Infinite within the compass of man's finite comprehension.

The last extract I shall make from this author will be rather long. At p. 101 he says, 'The creation of the

sun and the heavenly host was contemporaneous with or prior to that of the earth. Moses informs us of this important fact in the words we have cited—the first sentence in the Bible—and Science bears witness to the truth of this testimony. The science of astronomy affords the most conclusive and convincing evidence to the effect, that had the sun not been in existence when the earth was created, or had its formation not been in proportion to the formation or creation of the mass of the earth,* the *latter* having no regulating force, no governing power to control its immense centrifugal impetus, would have no orbit, no circular or elliptical motion, no day, no night, but would have swept through immensity with inconceivable velocity; or, most probably, would have wandered about amongst other solar (*sic*) systems, smashing their planets to atoms, and being smashed in return, as a result of its awful contact.' He says this is clearly indicated in Nehemiah ix. 6, which appears to me a plain recital that the Lord God made all things, but not in what order they were created.†

If I say Sir Robert Peel restored the English currency, removed the Catholic disabilities, put on the income tax, and removed the corn laws which formerly existed in England, do I, in writing these facts concisely, therefore imply they were all done in the same session of Parliament?

If I should say, a watchmaker must of necessity place the main-spring in a watch-case first, or all his works will fly away, should I not be thought a fool or

* Does he mean the earth is greater than the sun?

† If the sun was then created, but not visible, why not say so?

madman? Cannot an engineer start and control the speed of his engine and stop it when he likes? Was not the motion of the earth stopped at the time of the battle of Gibeon? No doubt the Lord controlled the motion of the earth before the sun was set, to influence it by some other power, which controlling influence having been removed, being no longer required, we have no knowledge what it was.

When we go into a large workshop, we see a number of shafts revolving at different velocities, all driven by one single steam engine. So it is with the planetary system; only we cannot see the steam engine. Surely the Almighty, if He chose, could suspend the world on nothing and by nothing, for there is *no* limit to His power. He could also make it revolve as slow or fast as He liked, before the sun was made.

All this, it appears to me, has its origin in an endeavour to explain or refine too much; we do not like to recognise that there are even now any things 'concealed.' I do not see that we have any clue to read the exact process of the Creator, in His working, in the formation of the world, in the ages preceding the opening of the book of Genesis, when it appears to me the geologists' tertiary formation was closed.

Our geologists inform us that the earth passed through several distinct stages before it assumed its present state, perhaps *three*; and that water and fire have been probably decided agents in each formation. Our formation has been once changed materially by water, and it is revealed to us that it shall be by fire also. Just before man was created, the world was prepared for his residence and comfort, as described in

the first chapter of Genesis; and I think it would be safer for geologists, whilst examining and studying the early formations, to confine the words of Scripture to the recent or antediluvian and postdiluvian times. There cannot be a doubt but that our earth's surface is very different from what it was before the Deluge.

There is, however, a very different view of the matter, as later on I shall endeavour to show.

The first distinct record of an earthquake or volcanic eruption that we have, is in the destruction of Sodom and Gomorrah, and yet the author of the article in Smith's 'Bible Dictionary,' 'Salt Sea,' will not allow that the Dead Sea was then created; to my mind it is perfectly conclusive that the Jordan originally flowed through a plain in a valley. In Gen. xiii. 10, we have, 'And Lot lifted up his eyes and beheld all the plain of Jordan, that it was well watered everywhere, before the Lord destroyed Sodom and Gomorrah.' May we not suppose from this, it was not as well watered afterwards? Then, in Gen. xiv. 3, we have, 'All these five kings joined together in the vale of Siddim,* which is the Salt Sea.'

No doubt these last five words are not Abraham's, by whom, I suppose, the original notes were written from which this part of Genesis is compiled; neither, very likely, are they put in by Moses, who never was in Canaan. But does it make any difference if Ezra or any other person put them in?

In reprinting the escape of Charles II. after the battle of Worcester, and his sailing from Brighthelmstone, does it make any difference in the truth of the narrative,

* May not these words imply 'laboured' or *cultivated* 'land'?

who puts in 'the present Brighton?' Does it alter the date of his sailing?

It was put in with an honest intention at explanation; science seizes on it to create doubt and distrust. Unless thus explained, we should never have known where the vale of Siddim was.

In verse 10 we are told the vale of Siddim was full of slime (asphalt) pits—not a very uncommon thing in a country liable to a volcanic eruption. In Gen. xviii. 16, the angels are mentioned as looking towards Sodom; in xix. 24, the ruin of the cities is spoken of much in the same way as many persons have described a volcanic outburst, that is, a rain of fire and brimstone. And in verse 27 it appeared to Abraham as it would to an observer of the present time near Vesuvius. It was from Mamre that this was seen by Abraham; he, an unscientific man, describes the event in a concise and unmethodical manner, so as not to please a philosopher of the nineteenth century, A.D.; but he describes it as it appeared to him. Looking down upon the plain he saw the cloud which is invariably produced by the eruption of a volcano, and from which always falls a rain of fire or ashes, more or less violent and more or less charged with sulphur; this, with the accompanying lava, would produce the exact appearance described. I have assumed that the five words have been added by some one else; it is by no means certain that they are *not* Abraham's; he, writing for his descendants, would thus indicate to them that the plain of Jordan, the vale of Siddim, had been turned into a sea of salt by the Lord, as a punishment to the inhabitants of the cities.

The article in Smith's 'Bible Dictionary' is in vol. iii. p. 1,173 and the following; the writer says, 'It (the sea) is in fact a pool, left by the ocean in its retreat from what there is reason to believe was at a very remote period a channel connecting the Mediterranean with the Red Sea.'

I wonder how. At p. 1,179, speaking of some of the cliffs on the west bank, he says, 'These appear to be the remains of late or post-tertiary date, deposited at a time when the water of the lake stood much higher, and covered a much larger area, than it does at present;' and at p. 1,185 we have this extraordinary expression, 'It does not appear probable that the condition or aspect of the lake, in Biblical times, was materially different from what it is at present.' He had previously said the universal belief, to within sixty years, was the 'cities of the plain had been submerged in the modern Dead Sea.' At p. 1,186, we have, 'The narrative in which this occurs is now generally acknowledged to be one of the most ancient of those venerable documents from which the early part of the book of Genesis was compiled.' But because a subsequent *editor* has explained some changes of name, so that localities may be recognised, this modern philosopher assumes a right to remodel the whole locality at his pleasure. On the same page he says, a rise of twenty feet might convert part of the low lands into a part of the sea, and 'such an exceptional state of things the writer of the words in Gen. xiv. 3, may have witnessed and placed on record.'

It seems to me this is utter folly. Does he mean the army of the five kings collected in a lake, to wait the approach of the four? He seems to forget Lot

selected the low land, which was already partially settled, because of its fertility. On p. 1,187 he says, 'There are no marks of any geological action nearly as recent as the date of Abraham. Inexperienced and enthusiastic travellers have reported craters, lava, pumice, scoriæ, as marks of modern volcanic action, at every step. But these things are not so easily recognised by inexperienced observers, nor, if seen, is the deduction from them so obvious.' When I consider that Mr. Scrope, in his work on Volcanoes, says igneous rocks are even now formed, I consider this last sentence to be pretty strong language, and, more, quite untrustworthy.

Of course I shall be considered too severe, if I say this writer does not believe the Bible. In Gen. xix. 28, we are told that 'the smoke of the country went up as the smoke of a furnace.' These are the words of that 'venerable document' he has spoken of; and when other men point out marks which correspond with these words, we are calmly told there are no geological evidences of anything like so late a date as Abraham, and the Dead Sea was in existence before Adam. The question rises in my mind, 'Do geologists do their sum correctly?' 'Is it so very certain the world was forming thousands of years before the first day of Genesis, when day and night were created, or time divided?'

I am not aware of any other passage of Scripture whereby the truth of the chronological deductions of Geology can be tested; but certainly, tried by this, they are proved to be decidedly in error. The Dead Sea level is upwards of 1,300 feet below the level of the Mediterranean; in its greatest depth it is above 1,300 feet

deep. As geological theory does not point out how this could happen in forty-one centuries, although during the present century we have on record an island raised in the middle of the Atlantic and another in the middle of the Mediterranean, as well as a subsidence of a tract of land in Cutch, about the size of the Dead Sea, say fifty miles by ten, though the subsidence is not so great as that of the Dead Sea, a geological writer decides that the account of an eye-witness is not trustworthy; for this is what all his reasoning comes to. In the evening, Abraham, from Mamre, looked over the plain and saw the cities in it; he saw the fire apparently falling from heaven, and afterwards he saw the land smoking; and we are told nothing of the kind took place. The fact is, volcanic effects are much more recently produced than has hitherto been supposed.

Having thus, to my own satisfaction, settled the theories of chronology, in their lingual, numerical, and geological forms, perhaps it may be asked how I get over the *facts* of stone implements.

Lubbock, in 'Prehistoric Times,' p. 2, divides prehistoric archæology into four epochs, viz., two of stone and two of metal, though in the last he says, 'Stone weapons, however, of many kinds were still in use during the age of bronze, and even during that of iron.'

Again: 'In this limited sense, the above has not met with general acceptance; there are some who believe that arms and implements of stone, bronze, and iron were used contemporaneously.'

I do not know in what age he would put either the battle of Salamis, or that of Hastings. Herodotus says, some of the troops of Xerxes were armed with arrows

pointed with a stone, with which they cut seals (see Book vii. 69 c.) This was less than 500 years before our A.D. Again, William of Poitiers says the English at Hastings were partly armed with clubs in which stones (? axes) were set. This, we know, was only a little more than 800 years ago. In what ages were these two battles fought?

I cannot but think a better division would be into stone, mixed, and metal—it is quite impossible to separate two ages of stone; even now there are places where the difference in the finish of iron implements made at the two places is quite as great as any difference found in stone implements. Again; Salamis and Hastings cannot be either set down to stone ages. On pp. 318, 319, Sir John refers to the cone of the Tinière, and I gather that he finds there signs of the bronze age and of the stone age; he gives M. Morlot's deductions, and as he does not express any difference in opinion, therefore I suppose he coincides with him. These are an antiquity of 3,000 to 4,000 years for the bronze, and 5,000 to 7,000 years for the stone age. Should it not be 4,000 to 6,000 for the stone age? Now, as we have seen, Salamis was fought about 2,350 years, and Hastings 800 years back, and stone used in both.

I am one of those who believe, though primarily stone alone was used, that the application of metals to use came in together, and stone gradually went out; metals were in use before the Deluge; the use once having been acquired, the art of making bronze or *brass*, as translated in the Bible, being learnt, would not be lost, and the natural conclusion is, there are no *pure stone finds* of a date subsequent to the Deluge. We

then come to this position, that all of the drift, or palæolithic, are of the antediluvian era; and this is the explanation of their being found in the drift, 'or in the débris caused by the rollers, or goings and returnings of the waters during the Deluge,' and the effect of the glacial era.

I believe many stone implements have been found in Ireland, whether any in the 'crannoges' or not I am not sure, as these crannoges had not disappeared until after A.D. 1567 (see 'Prehistoric Times,' p. 121); if they have been found in them, we should find stone not gone out of use in Ireland quite 300 years.

Sir John Lubbock's remarks, on p. 131, respecting the use of the axe, would, word for word, apply to the lumberman or timber-getter of Canada and the United States; they seem to be able to use them almost as penknives. I have been told, a man made a bet he could *shave* himself with his axe, and won his bet. I only state what I was told, not what I *know*. I give the story, to convey in some way an idea how completely they have the axe in command, and to what an extreme delicate edge they grind it. Sir John says, in some 'finds' axes are invariably larger than others. If he had been aware the experienced timber-cutter of the United States of America would choose an axe twice the weight to cut down a pine tree, over that with which he would attack an oak, he perhaps would see a reason for it; probably the reason lay, if not in difference of timber, to one being a weapon, the other a tool.

Sir John points out there has been a distinct glacial era; that is, if I understand him rightly, between the

palæolithic and neolithic ages; that in the stone age proper, or palæolithic, remains of the elephant and rhinoceros are found, but not in the neolithic. Now, if we had neither frost, sun, nor rain, there would be no difficulty in these animals, as far as climate and food are concerned, living even now in France and England, where they appear to have lived at one time since man was living. Such I suppose to have been the climate of the antediluvian era, only not so hot as the extreme of our summer, and the temperature quite equal, with the sun always on the equator. In such a climate probably Nature would clothe these animals with hair. We know animals do lose much of their hair when carried to the tropics; when English horses are carried to India, they never, in the winter there, acquire the excessive long coats they do in England at the end of the autumn.

As regards animals, the disappearance of the large herbaceous kinds seem proved by Sir John to have been very gradual, and may be perhaps owing to civilisation more than any other cause. At p. 150, he says, the urus 'still existed in Germany during the sixteenth century, soon after which, however, it must have become extinct. The aurochs, or European bison, seems to have disappeared from Western Europe at about the same period as the urus; in Prussia the last was killed in 1775; at present it is confined in Europe to the imperial forests in Lithuania, where it is preserved by the Emperor of Russia.' On the same page he says, 'Though the elk is not noticed in Switzerland in the historical period (I have myself very great doubts if it could ever have existed in such a mountainous district, and if

its remains are found there, they prove decidedly the recent elevation of the mountains); yet Cæsar does mention it in the Hircynian forest, and it was even found in Hungary and Sclavonia in the twelfth century, and the death of one is recorded in Saxony in 1746.'

I think this is quite enough to show that it is no very extreme length of time since these large animals were met with in the West of Europe.

At page 306, Sir John Lubbock mentions a tiger having been killed on the Lena, in 52° 15′ North, in 1828. My assertion, therefore, that tropical animals could even now exist in England if we had neither frost nor snow, cannot be called at all extravagant.

On the same page he says, 'While admitting these difficulties, it is still, I think, felt by most palæontologists, that though the presence of one arctic species would scarcely perhaps justify any very decided influence as to climate, still, that the co-existence of such a group as this—the musk ox, the reindeer, the lemming, the *Myodes torquatus*, the Siberian mammoth, and its faithful companion the woolly-haired rhinoceros, decidedly indicates, even though it may not prove, the continued existence of a climate unlike that now prevailing in Western Europe.' I have offered a solution of this question. Will it be accepted?

Falconer suggests, whether man may not have seen the gigantic tortoise of which he found fossil remains, *because* with it he found remains of an *existing species*.

I ask, Why may not man and the mammoth have lived together? The mammoth and bos primogenius lived together, and man and the bos primogenius.

If so, those deposits where these remains are found have been formed since Adam.*

May not animals, from the effect of climate and food, have dwarfed, as Laps and Boshmen have? Are not Arab horses and Shetland ponies the same species?

* In 'Land and Water,' of March 6, 1869, there is an account of bones of extinct animals and two human skulls having been found close to the Ferry Boat Inn, by the River Lea.

NOTE.

After these 'cosas' were in the hands of a London publisher, there appeared in the London *Times* of June 17, 1869, an account of a discovery in France in the Département de la Dordogne, of five human skeletons, the *bones* of a gorilla type, gigantic in size and form, *but the skulls not simian*, coeval with the mammoths. Does this answer my question at the foot of p. 283?

CHAPTER XI.

VARIOUS COSAS—*continued.*

I THINK it a very natural error for geologists to have made, *not* to consider whether there were mountains before the Deluge. The account we have in Genesis of the creation, written as we know it was afterwards, speaks as if the locality of Eden could then be recognised; this would naturally lead anyone to infer that no great change had occurred in the surface of the earth. In the Bible, hills and mountains are spoken of as being covered; the same word is used in both cases, and perhaps it implies the '*highest hills*' *—hills being known to the original author. But in Gen. ix. 11 and 15, the Flood is spoken of as having *destroyed* the earth, as well as all flesh, according to the threat in Gen. vi. 13; the effects of the Flood, not yet ended, are so entirely to remodel the face of the earth, as to amount to a real destruction and reconstruction. Assuming this to be the case, we see at once there must be a very different climate. Then again, what effect would the creation of the rain clouds produce? If our heat is caused by an exhalation or gas from the interior of our globe, do these clouds tend to keep it nearer the earth, to condense or intensify it, and prevent it from

* As I believe the LXX words may be interpreted.

flying away into open space? Again; must not volcanic force or plutonic power (whichever is the right name for our internal heat), being once let loose, go on growing in intensity till it is exhausted? Is not this evident from what we know of climates? Does not all evidence go to show that our winters are decidedly warmer than they were some centuries back, within well recorded historic times?

May not our rain clouds, in addition to preventing our heat from escaping, also act as a species of *lens* for the sun's rays, thereby adding to the exhalation of the internal heat, to an extent which could not have existed before they were formed? The water in our clouds must exist in minute particles, probably more like an oval than a circular or spherical particle.*

Sir C. Lyell, in his 'Antiquity of Man,' expresses an opinion that in the glacial epoch there was not only a subsidence but a subsequent elevation of the land; and he states, that at one time the British Isles, including the Hebrides, Orkneys, and Shetlands, were connected with one another and with the Continent, the whole German Ocean being dry (Map 41). This is not very different from my own ideas, which are, that *perhaps* the earth or dry land, before the Deluge, was, as it were, a band or belt of land, from say 55° N. to 55° S. all round the world, with a northern and southern ocean, the dry land being superimposed on a stratum of water above the primitive rocks; as the volcanic or plutonic power increased it at last acquired force to raise or break the rocky strata, and threw the water upon the land, the earth in places subsiding into hollows,

* Moisture is generally assumed to be in globules. In the mass of the clouds would not these be flattened into ovals?

thus bringing the rocks and earth into their present connection. The water, when subsequently evaporated, left marks of its former height, and has thus led to the theory of subsidence and elevation. No doubt an elevating or expanding process is going on, caused by the expansion of the rocks from internal volcanic heat.

This would require less time than elevation; and if there were no mountains, the time for the submersion thus caused by a volcanic outburst would not of necessity be very long.

Sir C. Lyell, in his 'Principles of Geology,' speaking of the earthquake in Cutch, says it would be quite impossible to detect the difference between it and a following one, unless notes had been taken and recorded at the time of the first. How, then, can he point out, that first, the land north of the Thames, and Bristol Channel, and that of Ireland, was reduced to an archipelago, and finally further submerged, so that only the mountain tops were left? *Where are his records?*

I shall be told the face of the earth shows these facts. I reply, facts may be misinterpreted. What would be the difference in the present appearances, if the submergence took place as I say, and there was *no elevation*, only a drying of the land by evaporation, and a subsequent elevation of the mountains?

If the meaning of Habakkuk iii. 11, is, the sun and moon ceased to act for a time, we have a glacial era of that duration. 'God then remembered Noah;' He allowed the sun again to act, and the waters were absorbed, by being evaporated from the earth, a part of the land being raised, and a part still more depressed.

All extraordinary geological facts can be made to

correspond with Scripture, if geologists read these facts aright. Erasmus says, 'Science and Christianity cannot differ.' Lubbock says, p. viii., in his preface to 'Prehistoric Times,' 'Fully satisfied that religion and science cannot in reality be at variance, I have striven in the present publication to follow out the rule laid down by the Bishop of London, "that it would be treason to the majesty at once of science and of religion, if he sought to help either by swerving ever so little from the straight line of truth."'*

Now, what do we find Sir John Lubbock saying, at p. 328? 'It has been calculated that the denudation of the Weald must have required more than 150,000,000 of years.' Again, p. 329: 'All geologists, indeed, are now prepared to admit that man has existed on our earth for a much longer period than was until recently supposed to have been the case.'

Now, as I have before said, not being a geologist, I do not admit this; but I ask Sir John how this is to agree with his declaration that he is 'fully satisfied religion and science cannot in reality be at variance?' Where do we get our religion from? Is it not the Bible, which we believe, at least some do, to have emanated from One who can neither lie nor err? And how can these discrepancies agree? One must give way; which, man or the Almighty? Is the Bible to be rewritten to please science, or shall the fair lady recast her sum and see if she has 'missed a figure?'

At p. 329 Lubbock says, 'Turning now to the ethnology of the drift period, we have only two skulls which can be referred with any degree of probability

* Why does he place science *first*, as the author of 'Geology and Genesis' does, if he believes Scripture?

to the age of the extinct mammalia.' Rather slight evidence (though proving man lived then), I should think, to prove the length of that period he refers to, on the same page, already quoted. One of these was found in the cave of Engis, the other in the Neanderthal. He says, 'The first of these might have been that of a modern European. It is in fact a fair average human skull, which might have belonged to a philosopher, or might have contained the thoughtless brain of a savage. The case of the Neanderthal skull is very different; under whatever aspect we view this cranium we meet with ape-like characters, stamping it as the most pithecoid of human crania yet discovered.' 'The brain appears to have been of considerable size, and indeed is estimated at about the average of the Polynesian and Hottentot skulls;' or, in other words, both these skulls might fit the necks of men now living on the face of the earth. They prove only what we have known to have always existed, a great diversity in the human mind (or brain), habits, and disposition.

In Gen. iv. 16, we have, 'And Cain went out from the presence of the Lord.'

What do these words imply?

This chapter may be said to tell us all we know of antediluvian society. Cain separates himself from his father, or repudiates a God, becomes a wanderer, implying living by fruits of the chase, as Lubbock says the people of the 'drift' existed; thus are implied *two* distinct races then began, 'the sons of God and the daughters of men.' Lubbock proves this is found in the earliest '*finds*,' and we can see the same wherever we look at present. Take 658 of the heads of the 'roughs'

of London, and compare them with the heads of the 658 members of the House of Commons. Will there be no difference?

Now here we have a 'fragment' which seems to have been entirely overlooked—the division of mankind during the life of the progenitor of the human race, into two distinct classes. It is extraordinary archæologists did not recognise it. Further, *all* we have handed down to us respecting the state of civilisation in the antediluvian era is in connection with the descendants of Cain—rather a warning to philosophers, or 'philosophers falsely so called.' In verses 20, 21, 22, of Gen. iv. we are told of the first use of metals—bronze, or brass and iron, seem to have come into use simultaneously; also of the invention of music, and that a part, if not all, the descendants of Cain changed their mode of living and became herdsmen.

Archbishop Usher, in his confused Chronology, or some printer, in placing the margin chronological figures against a wrong verse, makes this to have taken place 130 years after the creation of the world; but if we look into it we see it is much later.

Cain's son, Enoch, is said by Usher to be born in 3875 B.C.; then we have Irad, Mehujael, Methusael, Lamech, and Lamech's three sons, or six generations, from Cain to the use of metals; as we have no dates given, we can only arrive at any sort of approximation to the time by comparing this branch with that of Seth. Seth was born in 3874 B.C., according to Usher, and his sixth descendant was born 557 years after, or in 3317 B.C., in the 687th year after Usher, from the creation of Adam, 141 years before the middle of the

antediluvian era; allowing Tubal Cain, the descendant of the elder branch of the family, to have been born before Seth's sixth descendant, we may assume the use of metals began to be known about 830 years after Adam's creation, or midway in the antediluvian era, according to my ideas, not before 3900 B.C., even allowing for 371 years of sleep, or 'hybernation,' during the Deluge.

Looking, however, at the long lives we have handed down to us in connection with the antediluvians, I should be inclined to bring the use of metals nearer the time of the Deluge, and into what we may suppose to have been about Tubal Cain's middle age, or say about 600 years before the Deluge; this would bring the first use of metals down to say 3650 B.C. or 3600 B.C.

As Tubal Cain is recorded as the first who made use of 'brass and iron,' I assume there were no separate Bronze and Iron Ages.

Now these speculations are not based on a few stone or metal implements dug out of the earth, but on the oldest known book in the world, one which has received respect from even intelligent heathen emperors.

Is, then, Science a lineal descendant from Cain? Philosophers certainly seem to prove it by their actions. Do they not, in so steadily refusing to receive any instruction from the Bible, show their resolution to follow in the steps of their progenitor, as quoted in Gen. iv. 16?

May we, in the invention or first application of the use of metals by Tubal Cain, trace the first steps of science? If so, have we here the origin of the classic

fable of the birth of Minerva from the head of Jupiter, by means of Vulcan's axe? There is no great ingenuity required to trace Vulcan back to Tubal Cain: changing the T into a V, we have Vubal Cain, and a mere dropping of the 'ba' leaves us Vul Cain.

At p. 45, in his 'Prehistoric Times,' we find Lubbock saying Marseilles was founded about 600 B.C., Utica about 1100 B.C., and Cadiz not long after the fall of Troy, say, perhaps, in 1170 B.C.; and at p. 46, 'Unless, therefore, the Ancients had some source of information with which we are unacquainted, it seems to be well established, and is even admitted by Sir C. Lewis, that the Phœnician tin was mainly, if not altogether, derived from Cornwall.' . . . We are, therefore, quite justified in concluding that between B.C. 1500 and B.C. 1200, the Phœnicians sailed into the Atlantic,* and discovered the mineral fields of Spain and Britain.† And I have given reasons. Why are we to suppose the Phœnicians sailed to Cornwall before they founded Cadiz, as say B.C. 1170? There were other sources of tin known to them.*

In Numbers xxxi. we have the victory of Moses over the Midianites, and in verse 22, 'iron, tin, and lead' are stated amongst the spoil. Where did the Midianites obtain these metals? Surely not in Cornwall, in the sixteenth century B.C. Where were Tarshish and Chittim? In Numbers xxiv. 24, we have, 'And ships shall come from the coasts of Chittim, and shall afflict

* He does not appear to be aware that ships have been found buried or sunk in the New Forest, which seem to prove a traffic from Cornwall by the Isle of Wight across Hants.

† In his 'Ancient Britons' Sir C. Lewis says decidedly the Phœnicians arrived in our English waters before Marseilles.

Asshur, and shall afflict Eber.' Now we suppose Asshur is Assyria, and Eber, applying to all the descendants of Eber, included Arabia.

In Gen. x. we find Chittim and Tarshish associated together. Must we not, then, conclude the Midianites derived their tin from Chittim? That Chittim lay to the east is conclusive, as a fleet from Cyprus could never afflict Assyria or Arabia; and besides, Cyprus was not settled when Moses subdued the Midianites. It is conclusive, therefore, putting Cyprus as Chittim is wrong.

But it is really surprising to find an eminent London banker, one of the 'Merchant Princes' of the nineteenth century A.D., not turning to a commercial dictionary, where he would have found tin is produced not only in Banca, but in Japan, China, Siam, Java, Sumatra, Borneo, and Celebes; all of which places are more easily accessible, either from the Gulf of Akaba or the head of the Persian Gulf, by ships availing themselves of the monsoons, than Cornwall from Tyre. It is amongst these countries and islands that Chittim, Tarshish, and Ophir must be looked for. The original words in Gen. x. 5, which we translate 'the isles of the Gentiles,' are two words—*coasts*, *isles*—and doubtless an '*and*' has been lost.*

Learned men, following the Greeks, have never looked to the East for these places, but have only seen Tarshish in Spain, because there was a *Tartessus* there known to the Grecians; but Tarshish and Chittim were known to Shem, when he composed the original of Gen. x.; they were recognised by Moses when he com-

* Perhaps isles along the coasts, as the Indian islands often are.

plied the book of Genesis, and Chittim was recognised by the author of the book of Numbers as in the East. Solomon built ships, i. e. i. Tarshish from the Red Sea, which it is said they did do, and they brought back cargoes of Eastern produce: if Solomon was desirous to trade with Spain, being friendly with Hiram, why did he not charter Tyrian ships, and not build ships to sail round the whole of Africa?

Jonah in his flight went to Joppa to meet a caravan on its road to Ezion-Geber, and joined them with the intention of escaping to Tarshish.

Daniel in chap. xi. refers entirely to Alexander; and though the thirtieth verse is generally applied to the Romans, there can be no doubt but it is an error. The King of Grecia is by name mentioned in the second verse, and the paragraph is unbroken to the thirtieth, in which his repulse by the 'ships of Chittim' is mentioned. Here we have a record of a defeat of Alexander not found in profane history.

Can the 'ships of Chittim' have been a Malay fleet? The Malays have always been, and still are, the best sailors of Eastern people.

The author of 'Tarshish,' in Smith's 'Bible Dictionary,' says, 'If the book of Chronicles is to be followed, there would seem to have been a Tarshish accessible from the Red Sea, in addition to the Tarshish in the south of Spain.' And he quotes Keil, who supposes the ships Solomon had built at Ezion-Geber were transported to the Mediterranean, and mildly says, 'But this seems improbable.' I should think so. Solomon was possibly obliged to transport a part of his timto Ezion-Geber, but it was easier to do that, than

bodily to transport his ships. All the produce described as brought from Tarshish is Indian; and though there may be very serious and perhaps insuperable difficulties in pointing out the exact place, we may feel certain it was not very far from Siam, or the Straits of Malacca. The Malays are stated, in Kitto's 'Cyclopædia,' to call *gold mines* 'ophirs.' At present, some French travellers have recently found in Siam, or Cambodia, extraordinary remains of a large city. At Aden there are large water-tanks, or receptacles made centuries ago, of which we now have the benefit; only thirty years ago they had not been discovered. The capital of Siam is called Juthia, which more nearly resembles Ophir than Zulla, on the coast of the Red Sea, does Havilah, as I find one writer deriving it from. The Burmese often address the Deity as *Phra*—very nearly Egyptian.

If, then, these three localities may be found in the vicinity of the Straits of Malacca, is it not possible our Japan or Java may be the country of Javan? How did Japan get its name? It is not the native name?* The two words may be said to be identical. And no doubt America and Australia were settled from the east and south-east of Asia before letters were invented, and subsequently, but also before the invention of letters, the bridges were broken.

There is nothing in real geological chronology against this position of mine, as we shall find when we look the matter calmly in the face. At p. 128, Scrope, in

* Niphon is the native name. Niphon, Nipphan, Jaffan, Japan, are easily interchanged. Wallace, in his 'Malay Archipelago,' mentions a 'Mount Ophir.'

his work on volcanoes, says, 'It is an error to limit the production of volcanic rocks of particular mineral composition to separate periods of the history of the globe.' And p. 129, 'In truth, so far from the felspathic lavas being universally of earlier date than those in which the augitic and ferruginous minerals predominate, it is well known many of the oldest traps are of the latter kind (basalt or greenstone). The opinion that mineral composition is any test of age, as respects the pyrogenous rocks, is fast passing away from among geologists, most of whom now consider granite may be of recent origin, and in course of formation and upthrust from beneath the superficial strata, at the present day.'

At p. 63, and following folios, of his 'Antiquity of Man,' Lyell refers to 'Researches in 1833–1834 of Dr. Schmenling in the Caverns near Liege.' The earliest year of the Doctor's researches I find mentioned is 1831. On p. 70, Lyell mentions the finding, 'at the depth of two feet below the crust of the stalagmite, three fragments of a human skull, and two perfect lower jaws with teeth;' and further on, 'The rock in which the Liege caverns occur belongs generally to the carboniferous or mountain limestone: in some few cases only, to the older Devonian formation.'

Now, all these formations are by him, on p. 7, placed in his 'Primary Strata.' Supposing, now, these caverns and their contents had been amongst the first, instead of the latest facts noted by geologists, would these strata have been placed amongst the most ancient formed, according to geological chronology? And would not, in that case, man, by his remains proving

his existence, have been supposed to have been in existence when these rocks were formed?

These strata having had an age given to them previously, when found at a greater depth, we are now driven to conclude, and very likely correctly, that these bones were brought into the caverns by water. But does it not prove there is no necessity for us to suppose hundreds of thousands of years have passed since these strata were formed, and which are met with at a depth of only about 350 feet from the surface?

In his table of strata, at p. 7, Lyell places the 'carboniferous limestone' the thirtieth; and allowing these bones to have been found in that, and at a depth of 250 feet, we have an average of eight feet to a stratum; and as he gives only thirty-six strata, our crust should be not over 350 feet deep. We well know this is not the case, probably in no instance; but it shows the weak ground that geologists stand upon in their reasons chronologically.

At p. 269, Scrope, quoting Mr. Hopkins, says, 'Movements of depression, acting slowly and continuously during long periods of deposition of sedimentary matter, as proved by the immense observed thickness of such stratified matter reaching at times to 20,000 to 40,000 feet.' Putting aside the unscientific expression of from 20,000 to 40,000—just a difference of double—I will ask where are stratified rocks exposed to a height of 20,000 feet? Perhaps I shall be referred to their being formed on the surface in stratified order. I do not consider this is satisfactory when Lyell finds strata of the primary formation within 250 feet of the surface, and Scrope tells us granite is even

now in process of manufacture, and rising towards the surface.

If Scrope is right, and granite and other strata are even now being formed by volcanic force, cannot we see the crust of the earth may be by comparison very recent, even if we give man only about 6,000 years?

At p. 220, Scrope, in speaking of the volcano of Kilauea, says, 'And at the bottom is usually seen a lake of more or less liquid and incandescent lava, but covered to a great part by a hardened crust, through which in several places the molten lava may be seen to boil up like water in a spring, and moderate discharges of vapour take place, throwing up scoriæ and forming as many small cinder cones.'

Is there not here some faint resemblance to our earth and the internal plutonic force? We live on the crust of a volcano. We know from experience the lava which had flowed from a volcanic eruption will become cool enough on the surface to permit people to live upon it, and yet, not many feet from the surface, be hot enough to set fire to dry articles, whilst, at the same time, the fluid ejected lava is so dense that stones upwards of 100 pounds in weight fall upon it from a great height, make no impression, but float off on the stream as straws or leaves do upon the current of a river.

Unless it can be shown that it is absolutely needful the world should have been the hundreds of thousands of years in preparation for man, which geologists represent, I must hold their chronology to be wrong. An all-wise, all-powerful Creator will neither waste time nor means in bringing about His ends; certain forces

are brought to act together, and the end is produced in the shortest space of time, just as a railway builder puts on the greatest amount of plant that can work together effectively for the end he wishes to bring about.

When, 'in the beginning,' the world was made, we are told it was in a semi-fluid state; all our rocks now in regular strata, according to their gravity, though each stratum is not everywhere of the same thickness, were then in solution; internal heat being applied, these various substances gradually assumed their present position according to their specific weight, and as the heat grew stronger, the mass began to revolve, as all heated substances do, and whilst rotating, the mass which was free to move necessarily took up the form of a sphere. There is nothing in this theory which militates against the fact that all fossil creatures of every kind found in the rocky strata may perhaps have been *all* in existence together, and became gradually extinct as the consolidation of the mass progressed, and the crust of the earth became formed and climates changed.

Perhaps the conglomerate mass began to revolve as soon as heat was excited.

In Gen. x. 25, we are told of Peleg's, birth; 'for in his days was the earth divided.' If I am right in my correction in Gen. xi. 10, 11, Peleg was born about 200 years after the Deluge, his name, Division, would accord with some great cosmical catastrophe or separation of the land.

But it is easy to see if this was the case; there may be a mixture of Asiatic and Australian birds to be

now found on some of the islands in the Eastern Ocean. I think it is well for this possibility to be considered before the Bible is thrown away. Wallace mentions such an island.

Birds or animals spreading south, the land communication broken, they are divided; one part wandering south, its appearance and habits are modified, whilst the other remains unchanged.

NOTE.

In Gen. x. we have three times the word 'divided,' viz. in verses 5, 25, and 32; but in the Hebrew there are two different words, one used in verses 5 and 32. The other, in verse 25, implies to 'cleave,' as if the earth was '*cut*' asunder as I should cut a cake; but in verses 5 and 32 it is divided, as I should divide the pieces among those round my table.

CHAPTER XII.

VARIOUS COSAS—*continued.*

BUNSEN, in his fourth volume of 'Egypt's Place in History,' says, if not exactly, yet spiritually, 'The task which European science has now to perform, is to bring that (Biblical) tradition within the pale of History, i.e. to deal with it conscientiously and honestly.' I consider this a challenge to those who believe in the integrity of the Bible; I have taken up his glove, and believe, as regards chronology, most persons who read my 'cosas' will admit I have corroborated the Biblical records. Of course I do not mean the chronology of Usher, but the *words* of the Bible; and seeing the Reformers made their stand on 'the Bible, the whole Bible, and nothing but the Bible,' I cannot imagine how 'this foolishness of wisdom' came to receive the sanction of authority. Sure I am that 'the plagues' threatened against those who add to, or deduct from, the words of God's book, have tormented all those who have divided their faith between God and man, or tried to serve two masters.

It is very evident that Baron Bunsen, with all his erudition, after bestowing immense labour on Egypt and its chronology, died entirely unsatisfied with his deductions in the latter. I do not believe I shall do this.

We have got, in this latter half of the nineteenth century A.D., into the unsatisfactory state of finding an attempt often made in our families to place servants above their masters and mistresses. Is there any resemblance in the attempt on the part of Science to overide the Biblical record, to this phase of family life?

Should not Science be the handmaid of Revelation? Much has been wisely held back from us in the progress of the world, and what has been made for man, as well as how it was made—because man can, by a right application of the power given him, discover these facts, and it is to his benefit to exert himself for this purpose; but it is only when his deductions are erroneous that they are not in agreement with the Biblical record; that is the proof that the sum or problem has been worked to its correct result.

We can easily see, therefore, the aid Science might give, expounding and clearing up to the mind those parts of the record which might almost appear to have been left purposely in a mist, apparently to make us labour, and thus to know His works better.

Herodotus has often been sneered at as a credulous traveller, but when thus spoken of I do not think he is judged fairly. It appears to me he described correctly what *he saw* himself; he relates what was *told* him, and says, distinctly, it was told him. He says, the priests (or educated men) in Egypt told him various things, and adds, 'Those who like to believe the stories of the priests may do so.' The natural inference from this is, that he himself did not. But at the same time he does not say there may not be some latent foun-

dation for what they relate, 'though,' as Smyth says, the truth be deep down and hard to come at.'

Now, are our geologists a bit better than Herodotus? nay, are they as trustworthy?

Let us take Sir Charles Lyell for an example. In his 'Principles of Geology,' vol. iii. p. 245, he says, 'In the Delta of the Ganges, bones of man have been found in digging a well, at the depth of ninety feet.' It will be said he gives his authority, viz. 'Von Hoff;' so does Herodotus, 'the priests of Egypt;' but adds, 'believe if you like;'—by that he infers he did not believe it. Sir C. Lyell says nothing of the kind; the inference is, that he believes Von Hoff. Am I unfair?

Now, as Sir C. Lyell knew the Ganges Delta to be entirely alluvial soil, his own common sense should have made him ask, 'Is it possible a well can have been sunk in it to that depth?'

It is only the ordinary reflection of any very common man.

Had he done this, he would have sought for information, and could easily have ascertained from persons then (living) in England, who had resided in India, or from records at the East India House, that there never has been a well sunk in the Ganges Delta, *by digging* to one fourth part of the depth stated.

If the attempt at an artesian well in Fort William, at Calcutta, is alluded to, how can an auger bring up human bones?

But this is neither a solitary nor a very recent instance of his credulity or his errors—probably, in late years, arising from a love of the marvellous; for in his 'Antiquity of Man,' p. 336, he writes, 'I am told by

Colonel Strachey and Dr. Hooker, that below Calcutta, when the flood subsides, the Ganges mud may be seen in cliffs eighty feet high, in which they have been unable to detect organic remains.'

Here again he gives authority. But I do not believe either party stated any such thing. Perhaps Sir Charles is *hard of hearing*.

Having myself resided several years in Bengal, and more than once passed through the network of rivers which form the Ganges Delta, I well know that if a line be drawn east and west through the centre of Calcutta, from the Hooghly to the Megna, the two rivers bounding the Delta on the west and east, there is not a square yard of land south of such line eight feet above neap high water in the month of April, the time when the water of the Ganges is at its lowest point, unless such land has been artificially raised.

There is no difficulty in proving this any day, by undoubted testimony.

Again, in the same work, p. 36, he refers to Mr. Horner's borings in Egypt, which are stated to have been carried to a depth of sixty feet. Though he says long before that depth the water had percolated through the soil, still he arrives at the conclusion that it would require 12,000 years, at an average deposit of six inches per century, to bury a piece of brick which was brought up, *though it is not said it was brought up from a depth of sixty feet*; and any one the least acquainted with such boring operations, knows how easy it is either to *shake down* any solid substance, or to drive it *before you*, more especially when boring in water or semi-liquid mud (to say nothing of *imposture*); but Sir

Charles says the auger was very small. How, then, can a *small* piece of brick be any proof? Then he ignores, or did not know of, the statues of Rameses the Great, which, including pedestals, have been covered to a depth of thirty-five feet with Nile deposit—since, say, 1500 B.C., or in thirty-three centuries; thus proving a deposit in historic times of *twice* his estimate; as well as the fact that Lepsius found forty-five feet of mud over the masonry in the Lake Mœris, which masonry must have been put together after 1950 B.C. (Were not Lepsius' 'Letters from Egypt' translated by *a Horner*? who was this Horner?)

Now, these are plain, palpable, visible facts—not estimates or speculations, made from the workings of a boring-rod, whether true or false; and we well know in the earlier years the deposit was doubtless greater than in recent times.

I then confidently ask how can any man put confidence in the deductions of Sir C. Lyell? and into what doubt and misgiving may he not lead those who read his works, and look up to him as a trustworthy authority?

Read his 'Antiquity of Man,' and you cannot help coming to the conclusion—'Why, here is a person arguing a bad case, a barrister pleading a cause he has no confidence in!'

Sir C. Lyell says most distinctly, this world was 'myriads of years' old before man appeared. He divides it into three great epochs, with several subdivisions in each; but we find granite of the primary, chalk of the secondary as well as tertiary and post-tertiary formations, all on the surface, and in contact

with the atmosphere, or covered by only a shallow layer of soil, formed from their own decay.

In Murchison's publication of the 'Palæontological Notes of Falconer,' I find Dr. Falconer states the Himalayas to be *granite*, and that they have been raised up many thousand feet since the so-called tertiary epoch. Now, according to all geological axioms, tertiary, being the latest, should be above or over the granite; but it will be said this is an exception caused by volcanic upthrust. But in the 'Memoirs of Sir John Richardson' I find at p. 242, in a letter, he mentions travelling over *granite* as he would over any common open country; he mentions neither plain, hills, nor mountains several thousand feet high, but he does mention rivers, and therefore the inference is, it must have been moderately undulating. How are these two *facts* to be made to agree, unless granite was part of the original boiler-plates which burst, some of which, as mountains, were forced up; some, as Sir John Richardson found, on perhaps its original level, and a third part is below the level of our present ocean?

We find fossil remains of animals similar to others where remains of man are found. Sir C. Lyell says these fossils are older than man by thousands of years. Now, as man could not have survived the process these fossils went through, Sir C. Lyell's words imply similar animals were created when man appeared, and yet have died out, whilst man has remained. How he can satisfy himself on this point is far beyond me.

Scrope tells us granite is even now formed. How can we tell between old and new, or granite formed, say,

200 years back, and 2,000? We could, if we had seen it developed, and noted it.

Huxley says chalk is even now in course of deposit between Ireland and Newfoundland;* a few very violent earthquakes, such as have been recorded, would raise this deposit above the Atlantic, and it would not require a long life, in such case, for a man to see a copy of the English South Downs in the middle of the ocean, though Sir J. Lubbock has said it took 150,000,000 years to denude the Weald.

An author, not so well known as these two baronets, a worthy disciple of Sir C. Lyell's, but, as all pupils should be, farther advanced, has put forth *his* ideas of the time occupied in the periods of creation described in Gen. i. He divides the earth into *four* formations. To the first, or igneous, he specifies no exact time. The second, or palæozoic epoch, comprised four days of Genesis—one of 2,127,050 years, one of 1,914,909 years, and two of each 709,219 years—thus making a total of 5,460,397 years; the Mesozoic, or fifth day of 219,837 years, and the recent, or that part of the sixth day, before man was created, only 141,813 years: these sum up to 5,812,047 years. But, probably not to shock his readers by too excessive accuracy, he says the whole time was 6,000,000 years. I am surprised he should think so meanly of his readers, as to suppose they would not reflect over and *note* his figures and remarks, were they to take them 'pur et simple?' Was he to be to them a spiritual Meg Merrilies: 'Gape, sinner, and

* If this deposit is *chalk*, does the carbonic acid gas come in the water from the Gulf of Mexico? If cretaceous it would require this gas to make it *chalk*; a volcano breaking out would furnish this.

swallow?' It is really delightful to meet such a writer, whether we feel he writes either from pure simplicity, or that his accuracy arises from an excess of knowledge.

But here we see the result of such teaching as Sir C. Lyell's and Sir John Lubbock's.

Is there no better way of explaining things than this? I think there is; if not, it is intended we should not try to unravel the thread. Now, one thing is evident to any one who reads the Bible: the creation is described as having occupied apparently six *equal* periods; and anyone who divides it differently, had better not allude to that book.

Is it natural or reasonable—and I suppose we have the power of reasoning—to suppose an All-powerful Creator (and He who made the world must have been all-powerful), would employ such an immense space of time to prepare a house for man, who was only to occupy it some 8,000 years at the extreme?

I have often said, and repeat it, I only write for those who believe the Bible.

We may reasonably infer that the world was made for man, if not told so directly. Though time is nothing to an Eternal Being, still, as we are finite creatures, capable of reasoning, it does seem a great waste of time and power to spend even only 6,000,000 years on a house which is not to be occupied above 8,000 years. We finite beings certainly do not so act.

Again, is the Creator a righteous and truthful Being? If not, farewell to all confidence in Revelation. But if He is, He cannot, either in a direct, or even most indirect way, countenance, encourage, sanction, or

imply a lie or any approach to deceit. A man can speak, act, sanction, or imply a lie or deceit, by mere silence. It is impossible for the All-righteous God so to act.

Scripture claims to be a revelation of God's dealings —I do not care to insist that every word was dictated by direct inspiration; but it answers the same purpose to insist that the meaning of every sentence was sanctioned by the Infinite, who either directed or allowed the revelation; this Scripture—the word, or sanctioned record, of Him Who made the world and all therein and Who could not err—positively and most clearly asserts that the earth, sun, and all creatures were made in six periods, and that man was made to be their lord, ruler, or master.

I find nothing to induce me for a moment to suppose that man was to inherit the *débris* of a previous world recast, a ruin rebuilt, a territory of monsters who had been swept off to provide room for other creatures of a higher development.

No one unacquainted with the speculations of geologists would from perusing the book of Genesis ever suppose such inferences. But the most rigid believer in those speculations finds himself sorely puzzled to distort the Mosaic account into a flimsy agreement with his favourite theory. In fact, I see no alternative for a Christian man, i.e. a believer in the Bible, but to say, 'God is true, but man may be mistaken;' I do not like to say, *a liar*, as this implies a desire to conceal or pervert *a known truth*.

Revelation gives us a chronology—perhaps we do not yet quite clearly understand it—but there is not room for an error of 1,000 years since man was made.

It appears to me it is easier to interpret words correctly, than stones.

I believe one axiom laid down in geology is, that 'all strata are to be found invariably in the same regular order; that primary *must* be below secondary, and in the same way secondary below tertiary.' If this is so, and we can in any case find a deviation from this *axiom*, what is the effect on geological theory?

Now, in Sir C. Lyell's 'Antiquity of Man,' chap. xvii. I find many remarks which lead me to infer that he finds cases where the '*loess*,' that is, the deposit or *débris* of the 'drift or glacial epoch,' which he says most decidedly is *post*-tertiary, is not only mixed up with, but *below*, *beneath*, or *within* chalk, which again is of the so-called secondary formation.

I am trying Sir C. Lyell by his own words, not by my arguments.

Not being either a scientific man or geologist, perhaps I am not able to read and understand correctly.

But it seems to my imperfect comprehension that, if we find post-tertiary and secondary *mixed*, they must have been in a fluid, or semifluid state, together; and if, in any case, the secondary overlaps or lies *above* the post-tertiary, the latter must have been consolidated, precipitated, or formed *first*. Where was 'tertiary' when 'secondary' and 'post-tertiary' became mixed?

I request my readers to refer to this chapter and form their own decision; I only ask of them, before they read, or re-read it, to lay aside all their preconceived opinions.

In this chapter, p. 345, he says, 'If we follow the line of fault, we may see the marks of polishing and

rubbing, which the chalk flints' (of the secondary formation) 'have undergone, as have many stones in the gravel of the drift,' (that is, of the post-tertiary), 'and some of these have also been forced into the soft chalk.' *Who are* '*these*?'—post-tertiary? or drift? What does *soft* chalk imply? Chalk like that now forming at the bottom of the Atlantic, mixed with polished stones of the post-tertiary? Does not the whole sentence imply that the secondary and post-tertiary were mixed up and rubbed together?

At p. 344, fig. 48, and p. 346, fig. 49, he gives diagrams which, to my unscientific eye, show this was the case.

Again, p. 347: 'In regard to the lines of movement in Moen, M. Puggard believes they took at least three distinct directions, at as many successive eras, all of post-glacial date.'

How can he tell that the movements were not simultaneous, radiating in three directions, caused by a volcanic action? They must have been caused by something. Has he any records, and has he forgotten his remarks on the Cutch earthquake, in his 'Principles of Geology?'

Sir C. Lyell may say, 'These are not *my* opinions,' but he makes no objection; and when a writer quotes in this manner, without comment or objection, he makes the remarks his own.

On the same page he says, 'It is impossible to behold such effects of reiterated local movements, all of *post*-tertiary date, without reflecting that but for the accidental presence of the stratified drift, all of which, where there has been so much denudation, might have

been easily missing, even if it had ever existed, we might have referred the verticality and flexures and faults of the rocks to an ancient period, such as the era between the chalk with flints and the Maestricht chalk, or to the latter formation, or to eocene or miocene or older phiocene eras, even the last of them long prior to the commencement of the glacial epoch.' Simply these words imply, there is no key to any kind of date or chronology in geology, if chalk and miocene events are liable to be identified with the same age as the stratified drift produced by the glacial era.

Again: 'Hence we may be permitted to suspect that in some other regions, where we have no such exact means at our command of testing the exact date of certain movements, the time may be far more modern than we usually suppose.'

What do these last words imply? Again; why say *date*? would not order be more correct? He gives no dates (for indeed he cannot) or time; and how can the 'presence of the stratified drift' be 'accidental?' This he does not attempt to explain, but treats it as if '*a pure accident.*' '*Accidental*' is his word; I say a pure or mere accident.

I ask, am not I justified in saying (in this work) Sir C. Lyell feels he is arguing a hopeless case?

In chap. xv. p. 320 and following, he writes as if in his opinion the Alpine glaciers had moved up and down the mountains, or had advanced and retreated; but as he has no records of such retreats after advances, I must again refer him to his remarks on the Cutch earthquake.

I consider this advance, or more properly the *descent*

of these glaciers, may be attributed to volcanic elevation of the mountains; and that the advance or 'descent' has been steadily and regularly downward, owing to the specific gravity of the ice, aided by dissolution at the lower end, and the tilting of the rock.

At p. 321 he says, 'In the deposits of this fourth period,' (i.e. the fourth advance of the glacier) 'the remains of the mammoth have been discovered, as at Morges, for example, on the Lake of Geneva.' Is it possible mammoths ever roamed among Alps of our present elevation?

I believe wherever geologists have carried their observations, they have found traces of a glacial era. Though I am no geologist, that is, not an implicit believer in geological theory, I am willing to recognise and agree with many of the deductions from the labours of geologists, when they say such and such appearances, or effects, are the result of such and such causes and forces. In his 'Journey to Brazil,' chap. xiii. p. 398, Professor Agassiz says, 'If the geological winter existed, it must have been cosmic;' and p. 425, where, speaking of the European glaciers covering central Europe, he says, 'thousands of feet thick, and when those of the Swiss mountains had ten times their present altitude.'

It appears to me the Professor is here describing a deluge, or flood,' of ice.

Of course, if during the glacial era all the world was covered—and this is apparently his belief—and our Alps were then at their present elevation, Central Europe must have been covered, thousands of feet deep, and all the world besides.

Supposing such a state of things to have lasted only one winter, could any aërial or terrestrial creature have survived? and how long would it take the sun to melt the ice? and where did the water go to? It seems to me much more difficult to believe the dicta of Science than Scripture.

Now, if the action of the sun was suspended, we can the more readily understand how the waters of the Deluge would accumulate, without either sinking into the earth or rising by evaporation. As they fell in rain, or issued from 'the fountains of the deep,' they *froze*: the Flood, then, was a flood of ice, rather than of water. The depth of ice would increase so long as the supply of water continued, and by degrees would acquire a depth of fifteen cubits, and cover the high hills, elevations, or mountains, or *swells*.

Now, here we have a cosmic glacial era, such as Professor Agassiz maintains must have existed; but the points of difference are in my favour: in one case the presence of water is easily and reasonably accounted for, in the other it is not; in one case the coating of ice was but fifteen cubits thick, in the other several thousand feet; in one case no great disturbance of the planetary system would be produced—and this would agree with what Dr. Pye-Smith has pointed out respecting the Deluge—but in the other case the disturbing influence *must* have been evident.

This disturbing influence is the strongest argument of Dr. Pye-Smith against the universality of the Deluge; but in removing this difficulty I remove the need of contradicting Scripture, by converting the Noachian

deluge to a local flood, such as that which is said to have happened in Greece in the days of Deucalion.

Geologists, I believe, generally recognise the existence of man before the glacial era. Now, we find Sir C. Lyell saying, 'Remains of mammoths are found in glaciers,' which I assert no doubt were remains of the Deluge; though remains of man and the mammoth may not have been found together, they may yet be, and there is no more doubt they did live together, than that Napoleon I. and myself were living together, though we were not acquainted. How, then, it will be asked, are these fossil remains to be explained, when I dare to assert they are not more than 6,000 years old?

My answer and firm belief are simply, that all our rocks, excepting, *perhaps*, those igneous strata in which no vestige of animal remains have been found, were formed at, and after the Deluge. Those igneous rocks were the boiler-plates of the old world.

In his 'Principles of Geology,' Sir C. Lyell says, that during the various changes which our world has gone through, continents have been moved or shifted in their positions. Does he intend to imply that our earth is like an orange, with a crust or rind in which the central part is detached, like a loose skin outside of an interior or central permanent mass? Or in other words, a kind of floating body of peat, in some degree like the floating island in Lake Windermere?

I believe the ancient Hebrew idea of cosmogony was something of this kind, and it appears to be implied by the words of St. Peter, 'standing out of the water and in the water,' as well as the words in Psalm xxiv. of the Prayer Book.

Is it possible Sir C. Lyell has ever thought this was once the case?

He does not give us any clue to discover how continents could be moved.

Geologists can see that the world has been destroyed and re-formed; but they cannot discover how this was done at the great deluge described in our Bible, though Revelation tells us the Almighty said, 'I will destroy what I have made.' Did He make the world? We are told, and should believe, that He did; He has given us an account of His doing so, and it is the only record we have of the world's formation. When a man destroys, or pulls down a house, he very frequently uses the materials in constructing a new edifice. Further, we have, 'I will not again bring a flood to *destroy* the earth.' What do these words imply? Do they not declare that the effects of the Flood were to *destroy* the world? Can expressions, one before, and one after the Deluge, be more distinct? It may, or may not be, that the destruction and the reconstruction of the earth took place in one year; the 'year,' like the 'day' in the creation, may have extended beyond a year, or the 'day' may have exceeded twenty-four hours.

Geologists claim an unlimited time for the one; why may I not claim a *limited* time for the other? In doing so, I give some explanation for the time I demand, although geologists give no clue of the process whereby they form their '*ipse dixit*' deductions.

After having said so much against geologists and their theory, it would be unfair if I did not propound some other theory or explanation. No man has a right to say, 'Your theory is radically wrong,' unless he

can propound another, which may not be more sound, though the proposer may imagine it is. I may not believe or understand a theory, and not be able to suggest another more correct; in that case I ought to plead, 'I do not agree,' but not say 'You are quite wrong.'

The first chapter of Genesis treats of the creation of the world, man, and all living and inanimate creation, in six epochs apparently of equal duration, which are well known and generally spoken of under the title of the 'six days of creation.' When man was placed on the earth, we are told all was 'very good,' or perfect.

Very good men think to get over the whole difficulty by giving an unlimited extent to the first two verses. But is this needful?

When a man in his journal records he built a house, he would say, 'Built my house in Elm Tree Park.' 'Laid the foundation.' Then, 'Put in the beams above the cellars.' Next, 'Put in the beams of the first floor.' And so on. Is there any very distant (perhaps irreverent) resemblance between the two?

The world is described as made, formed, or created 'without form,' i.e. it had not its present form. Or when the materials were, so to speak, put together they had not the form they afterwards assumed, when the original narrative, from which this chapter has its origin, was written.

All the materials which compose the mass of the globe were mixed together, and in a state of solution. Amongst these were, the principles or particles which, when brought into contact, create light, magnetism, electricity, heat or caloric. God said, 'Let there be

[illegible]

[illegible]

[illegible]

We are told that in the beginning the heavens and the earth were created. Was the sun created then, or is it what we call the *fourth day*?

I am disposed to think the sun was created in the beginning, though not visible, so to speak, before the fourth day. The sun seems to me to be an electro-magnet, which acts upon the matter in our earth from which *light* emanates.

Light and *heat* are one; this is evident from the fact that *vegetation* began before the sun was visible, and we *know* that *vegetation* requires heat.

The word in Gen. i. is used in Job xxxi. 26, for the sun, in Job xxxvii. 3, for the electric fluid, and in Isaiah xliv. 16, for *heat* derived from a fire. The deduction is plain—light and heat are one.

The sun, an electro-magnet, draws the electric fluid, a gas, from our earth; this gas is our atmosphere, the firmament; which, being charged with moisture, rose like steam from a saucepan, dried partially by the earth, and raised a part of the water to such an elevation as the laws of gravity permitted, where it was condensed and became the 'upper waters,' below which were the sun and moon.

The heat causing the mass to simmer, or boil, a scum rose to the surface, the antediluvian *dry*, or land.

Here we have light, atmosphere, land, three stages which must have followed each other. Take a sauce-pan, we have the same process; we apply heat, that is light, a steam begins to rise, and then a scum is formed.

The scum will be formed only of the very lightest particles, the heavier will arrange themselves according to their various gravities.

In the antediluvian times, these were the originals of what now are our stratified rocks.

They were semi-fluid, and when the 'fountains of the deep,' *all* the volcanoes of the earth, broke out in the Deluge, they were deranged, as we find them, and in them were buried many of the antediluvian animals which now are found in a fossil state; these strata we now find in our stratified rocks; they were consolidated between the pressure of the interior volcanic upthrust and the weight of ice overlaying them.

Probably in the three first periods such an amount of electric gas had emanated from the earth as to charge the sun, and make it not only to appear, but to re-act on the earth, which from that time has, in an 'ordinary course of nature,' continued. The moon also, of course, became visible, being a mirror—these bodies having been created in 'the beginning,' for the purpose of giving light, as well as regulating the earth's orbit, though for a time they did not act, or appear to act, or were not seen.

Now, it may, and probably will be said, 'You are derogating from the Creator.' That is not my wish; if I could, I would magnify Him, but that is beyond mortal

power. But I must say, I consider that man a superior clockmaker, who makes a clock with the intention that it shall strike the correct hour every sixty minutes, without further supervision, over another who has, every sixty minutes, to see his clock does strike, and to help it to do so.

The Almighty put together certain matter, or particles, with the direct intention that they should produce particular effects in regular order, as related in Genesis and described in the words, 'Let there be.' Thus the clockmaker virtually says, 'Let the clock strike one;' 'Let the clock strike two,' and so on.

The first chapter of Genesis says, 'God created the heavens and the earth.' In chap. ii. 3, we have 'All His work which He created and made;' the marginal reading is, 'created to make,' and in a work published by the Tract Society, edited by Dr. Eadie, of Glasgow, I see it is stated, under 'Create,' this is the proper rendering. The words of the Bible are doubtless those of the LXX, not the original Hebrew. If so, have we not, 'In the beginning God created the (matter which was to make, by its inherent principles, our) heavens and earth?' not those heavens into which St. Paul was transported, but the firmament, which we can see, and commonly call heaven.

From the exhalations of our volcanoes it is evident our internal globe is formed of a mass of molten materials, the fumes of which are most deleterious to human life, but, somewhat cooled, would promote a very rank vegetation. We can see, from vegetables being created the third day, and birds not till the fifth, there were two full epochs for this stage—one in which the

sun was shining. Is there not here time enough for the growth of those plants which compose our coa strata? Then, as the fluids, or semi-fluids, which now are consolidated and crystallised, or deposited and indurated in our stratified rocks, became denser, they filtered the gas more, making it suited for animal and human life; creatures suited to this state were then formed, whilst at the same time vegetation began also to act as a purifier, and finally man was brought on the scene when the air was suitable for him.

Vegetables will grow without sunlight, and if the earth was, when they were formed, of a spongy, peatish nature, certain kinds of the vegetable creation (such as are found in our coal formations), would grow most luxuriantly, if the atmosphere were of a hot steamy kind, such as would rise from a semi-fluid mass over an immense furnace of molten minerals.

This would be intensified rather than not, upon the fourth day, when the sun began to act together with the moon as an *aide-de-cœil.*

I do not think it is at all needful to say more on this point; I do not feel capable of bringing out a full and satisfactory theory at once: I have done my best to destroy all preconceived ideas; but as a few pints of nitro-glycerine are enough to lay St. Paul's in ruins, it would take more than one man to reconstruct as splendid an edifice out of the *débris*, so I must be allowed to act the part of the nitro-glycerine.

If the antediluvian earth was sustained on peat, a very heavy fall of rain, we well know, would depress it and cause the subjacent water to flow over it. Was the breaking up of the fountains of the deep caused by

such a subsidence and consequent overpouring of the water from its inferior basin? Is this the solution, and not that it was a flow of water from the interior of the globe, caused by volcanic agency, through rents and fissures in the earth's crust; or did both act in concert?

Again, suppose, according to Agassiz, the world was wrapped in ice, a volcanic upthrust began to act; would not the great pressure on the internal boiler, by confinement of the steam, tend to cause an effort to escape?

As mountains were elevated by this volcanic power, if any were raised to the permanent snow line of their several latitudes, the ice would rest there undissolved, whilst dissolved below.* Then, as further elevation took place in those parts, not over the whole of the tract, the ice would slide down gradually, or descend, or advance, as snow will slip from the roof of a house. Does this explain the formation of glaciers?

Will not this explain all those marks of 'striating,' supposed to be caused by ice? What could have caused the ice to *slide*, unless the earth below was raised, and must not the rocks have been soft, for the ice to have left such distinct, evident marks as we see?

I have never seen any attempt on the part of geologists to explain this; the ice could not have been floating when it scraped the rocks and caused furrows.

Lyell tells us, the British Islands were once joined to the Continent, and the North Sea did not exist. He says this state of things was changed by subsidence,

* And carry in it remains of animals, as Lyell says are found in Swiss glaciers near Geneva.

when all, or nearly all England, was submerged and then raised. I believe the British Islands and the Continent of Europe were joined; that probably *both* were submerged, and a part, not elevated, but sunk lower than the rest; the water was absorbed by the sun, leaving the land nearly as we find it now, but modified somewhat by volcanic elevation.

And now I will indulge in a few 'cosas' respecting the sun, though probably they may be thought as Quixotic as some of my others.

It appears to me that the sun in some way more resembles a gasometer than anything else I know of; perhaps it is a great electric or caloric magnet, drawing the heat from our planet: *consumes it*, returning to us the light; but does it return to us the heat we feel? I believe not. No doubt it does influence our heat.

When gasworks are built, the gasometer is erected before a retort is charged; so was the sun created as a meter, or reservoir, or magnet, for the electricity, light, or caloric which was to emanate from the earth; as the gasometer, when charged at the will of the manager, delivers its contents (light) by mains and pipes, so the sun, being fully charged in three days, began on the fourth to exhibit its rays. No doubt the sun, being set in motion, drew out the electricity of the earth, and at the Deluge, being made to stand still, the action on the electricity of the earth ceased.

(A friend was reading my original notes on the sun on Saturday, August 22, 1868, and on the 25th I was much surprised to find, in the *Times* of the 24th, a notice from Bombay to this effect: 'Eclipse observed.

Protuberances very remarkable and unexpected. Protuberances *of a gaseous nature.*')

We know the heat of the sun's rays varies in intensity; we probably shall know some day that there is an intimate connection in this with plutonic or volcanic eruptions.

It is not when we are nearest to the sun that his rays are most scorching; the difference of the angle of incidence between September 21 and December 21 will not explain this fact. I ask, therefore, May not the atmosphere be a lens through which the sun's rays act, and when the atmosphere is unduly or excessively charged by our internal electric furnace, the rays become more intense, and *vice versâ*?

If our heat proceeds, primarily, from the sun, why does snow lie in the tropics, on the summit of mountains, in latitudes where it never falls in the plains? Why is there a 'snow line?'

Does not this look as if our *rain-clouds* act as a curtain to prevent the heat rising above them, and they, either with the atmosphere or alone, act the part of a lens? That *we* feel the rays of the sun there can be no doubt; but, as far as we can judge, the snow on Chimborazo does not feel them. We feel the rays through the lens or 'burning-glass.'

Do electric or magnesium lights give out such an amount of heat, or anything approaching it, as we should expect from their intense light? If not, may the sun be an immense electric ball, revolving and consuming those gases, which we know *may* proceed from our earth, attracted towards the sun; and is this the atmosphere, the gaseous sea or ocean, in violent agita-

tion, which observers have noticed on the mottled face of the sun?

From the observations of aeronauts, we know sounds ascend *ten* fold more than they descend. Does not this distinctly demonstrate to us that there is an upward current from the earth?

Should anyone be disposed to think I have poached on Mr. J. Norman Lockyer's discoveries, I hope he will believe me I have not; Mr. Lockyer worked by sight with the spectroscope, I worked by thought, taking up the idea our light came from the sun, but not our heat; and the fact of sound being heard above, as well as objects on the earth being easily seen from a balloon, at a distance, we should be unable to see them if above us, I came to the conclusion that the sun was lit up by a gas from below.

Mr. Lockyer has observed a *downward rush of gas* from the sun; this, I imagine, is produced by the combustion of the gas, thus making the gas visible to our eyes.

I believe it is universally acknowledged that the centre of our earth consists of a mass of molten minerals; the heat from this *must* escape: it cannot be self-consumed. Heat, to an unscientific eye, seems to emanate from a heap, where a man is converting wood into charcoal: but not so intensely as the heat which proceeds from the same charcoal when consumed in contact with the air (or probably is formed in the heap of wood). In the same way we can observe a vapour. Is it not heated air? Exuding from a brick kiln, it is not retained entirely. There is but one escape for this internal heat, through the stratified rocks and earthy

matter, with an occasional lifting of a safety-valve in a volcanic explosion. When these valves are all stopped, we shall then have the '*dies iræ*.'

I wonder no Sir Charles Lyell has ever put forth some theory on this internal heat, to explain or attempt to explain *how* it acts. Is it beyond the reach of a wise man? Then some day a fool will jump at it, and do what a lazy boy, to get his nap, did to the steam engine.

It has been noticed in Cornwall, that copper is now in course of deposit in rocks, *or growing*. In California also, gold has been observed to be deposited by hot springs as well as hot air!

Cannot this be very easily explained? English smelters and manufacturers of chemicals find it pays them to construct chimneys or flues of an immense length, to allow the smoke or vapour which rises from their works to pass through, and in cooling, deposit mineral matter. In the same way the central gas of our earth, in passing through the superincumbent crust, deposits these minerals.

Near Stirling, in Scotland, there is a considerable tract of peat being converted into coal; doubtless this is not a solitary case, though the only one hitherto observed. Then our globe is *not* cooling, otherwise these vegetables, now being converted into coal, would have so changed before they were ever seen.

I believe it has been generally taken for granted, that the earth is cooling. Is this so?

In opposition to such an opinion, we have this conversion of vegetable matter into coal, as well as the deposit of copper and gold; neither of which could be

if our planet was cooling. But we have, moreover, Mr. Mallet's observations on earthquakes; which, according to his remarks, appear to become more frequent. I am quite disposed to believe we *note* these events more carefully than our ancestors did some 300 years ago; and again, they noted phenomena more diligently than their predecessors. But if earthquakes and volcanic eruptions are becoming more frequent, there is but one way to account for such results—that is, an *increase of internal heat.* The same may be seen in our winters, which in historic times have become milder. All this tends to prove that our heat proceeds from the interior of the earth.

Do we not see in the swelling of buds of trees, in colder countries than England, and some not so far north, as the Pole turns towards the sun between the two Solstices, that then commences apparently a flow of heat through the crust of the earth, which acts in the same manner as the subjacent heat of a hot-bed? Note any latitude in the north of Europe, or above 45° in North America, and it will be seen that the buds of trees swell before the temperature of the air is warm enough to affect them, and even where the ground is not only covered with snow, but actually frozen. Surely this proves most decidedly what I assert; it is perfectly evident that the roots are acted upon long before the branches can be. Does not sap rise?

As there will be a greater mass of heat at the equator, and as the two tropics, notwithstanding the oscillation of the earth, never pass out of the line of attraction to the sun, we see why that part of the globe is hotter, and more uniformly hot, than north or south of the tropics.

As our northern hemisphere turns south after the winter solstice, a larger part towards the pole, or quite up to it, has this internal heat drawn through it, and as it turns back again from the sun, say after the autumnal equinox, about the middle of October, or later, the heat is no longer drawn through the crust; we have therefore to depend on what heat may have been retained in the crust for our warmth, from that time till near the end of February. This is evidenced by the days becoming colder as they lengthen, showing that the reserve of heat is becoming exhausted, and no new supply coming up from below.

This is more evident in North America than in England, which latter is materially affected by the Gulf Stream; but in North America, even as low as 45° north latitude, the coldest weather is always in February.

The effect of this internal mass of heat, whatever may cause it, is to make our earth resemble an immense steam boiler: the earth and rocks are the plates, the molten minerals the water, the steam from them our air when purified, at times in excess, causing our earthquakes; as steam boilers at times 'prime,' so does this interior furnace throw out its ejections of water, and lava, and other matters, by volcanic vents, as a boiler does by the safety-valve. But in the earth the furnace is in the centre of the boiler, not beneath it.

Has no one ever noticed a train waiting in the station, and heard the rumbling in the water tank caused by the steam returned to it? Let anyone put his hand on the water tank, he will feel it throb—a miniature earthquake.

It appears to me the earth, resembling a steam boiler, that all our strata were formed as 'scale' is formed in a steam boiler, allowing for the different position in which I fancy the fire or 'igneous principle' to be placed.

Perhaps some of my readers may not know what 'scale' means. Scale, sometimes called 'fur,' is a formation which encrusts all boilers more or less, from the natural impurities in the water used in them, and always, unless most carefully guarded against, ends in an explosion.

Many persons, no doubt, have observed an operation in a sea-going steamer, technically called 'blowing off,' or letting out from the bottom of the boiler a part of the water, which carries with it this 'scale', or what, if consolidated, would become this 'scale.' Often have I seen people alarmed at the noise and trembling it creates; for it causes a steamer of 2,000 tons to quiver from end to end, and more nearly resembles an earthquake in miniature, than anything I know of.

Perhaps—I do not lay down any law—when the 'fountains of the deep broke out,' they brought with them discharges of earthy or sandy particles, which had begun to consolidate or form scale, as boilers *prime*. There are large tracts all over the world where this may be traced.

In one of my voyages on the Nile, we ran aground; whilst endeavouring to get afloat, I entered into conversation with the engineer of the boat, an Englishman, who told me the boiler was large and heavy enough for an engine of one-fourth more power. 'Why so?' I asked. 'Well, you see this is not water, but just mud

a pivot with escapes in its sides, the vessel will revolve, is it possible this is the cause of the earth revolving?

If the sun draws gas (a fluid) from the earth, into another fluid, our atmosphere, is there any kind of resemblance to the water drawn or pumped into the 'Waterwitch' and then let out, by which she is driven forward? Only, in our case the sun compels us to follow a particular ellipse or orbit?

I believe earthquakes are more felt in or near the 'primary' rocks, which are nearest the internal heat. We see the gas acting on them, as I have before pointed out, as the steam of a railway engine acts on the plates of the water tank; but the other strata not being so inflexible, as a rule earthquakes produce less effect among them.

In conclusion, I will remark to those who believe the Bible, and yet hold that man has descended from bedbugs or baboons (if there be such believers), that in Genesis i. we have the Creator saying, 'Let there be,' as if He was permitting the matter which He had created 'to work' or ferment, and of itself produce what are described as produced. But when the formation of man is described, there is no 'Let there be men' (mind, baboons and bugs already were in existence, being produced from the *earth*), but Deity says, 'Let us *make* man;' anyone, therefore, who believes the Bible must on reflection see another Power at work, *not the earth*.

Thus I can see, through all the record of creation, what is commonly spoken of as 'the ordinary course of nature,' but which would be more correctly described as 'the law of the Creator established when He made nature.' Many persons no doubt understand this, but I am afraid some do not.

No doubt during all the time before the Deluge, the consolidating of the rocky strata was preparing. I do not think the *whole* earth was, when Adam was created, fit for the occupation of man. 'The garden planted eastward in Eden' looks as if one spot was first adapted for man, and the remainder of the earth subsequently gradually became suited for his occupation.

Perhaps if the rain had not come down at the exact time it did, and weighted the strata so they could not expand, the boiler would not have burst so soon. The Lord is always at work; but we can see three separate acts which stand out very prominently, viz., '*the beginning*,' when matter was made, or created; *the creation of man*; and *the destruction of the primeval world*, of which, perhaps, I have made a very lame attempt at explanation. Sir C. Lyell says, it is beyond the reach of Science to explain it; I have, therefore, if I have failed, not cast any stain on her purity. But if Science cannot explain it, why reject Revelation?

No doubt some of my 'cosas' are in direct antagonism to received opinions; but what of that?

The time is past for new suggestions to be '*burked*' because they are new. Did not Galileo say 'Nature abhors a vacuum?' And the very fact that this satisfied no one, directed the attention of men's minds to the subject, and the true solution of the rise of water in pumps was discovered.

If the question had not been ventilated, the truth might not even yet have been revealed, and all the consequences resulting therefrom would have been lost to us.

Some of my 'cosas' may be like the answer of

Galileo—they may be unsatisfactory—perhaps erroneous—but what then? If they direct the thoughts of wise men to points neglected or too lightly taken for granted, I have played my part well, and shall be content to be in the wrong, if my wrong proves the means of eliciting the right.

One thing: I hope that nothing I have advanced may be misinterpreted to the dishonour of Him whose name should be honoured above *every* name.

NOTE ON FRONTISPIECE.

This seal, found at Memphis before 1842 (in which year an impression came into my hands), is by some said to date from B.C. 600 or 500. A translation of it having been requested from an eminent hierologist, he replied, 'It seems to have been the signet of a priest named Ra. nefer-hât, who held some sacerdotal office, amongst others the priesthood of the place or Pyramid of Cheops, or else was a prophet of the worship of Cheops himself, who was still honoured with divine rites as late as the time of the Ptolemies.' He also says, 'It reads, as far as can be made out, Ra. nefer-hât, divine father of Anubis, lord of Ru sat, priest of Isis, prophet of Cheops, Ra. nefer. hât.'

I consider this translation as not satisfactory. It will be seen that this gentleman begins and ends with the name of the priest, but the beginning and ending of the characters on this seal are *not* the same. Again; was the Rev. Ra. nefer. hât, the divine father of Anubis? I believe Anubis is sometimes represented by a jackal, and is said to be a son of Osiris; was he lord of Ru sat? Osiris is so described (Bunsen v. 721), where the term is applied to Rosetta, which place was not known by that name in the time of Osiris or Cheops, though it was thus known in the time of Ptolemy.

Being asked for a reference where mention of a worship of Cheops under the time of the Ptolemies could be found, he entirely broke down. It may be asked, Why do I write such trash? Simply to induce people to judge for themselves, and not submit to the 'ipse dixits' of a great authority, who too often may have got into a rut he will not trouble himself to get out of.

Here, however, I must say that I was fully impressed with the belief this was the seal of Cheops. I believe, also, I may say Dr. Abbott, to whom the original seal belonged, and no mean authority, was of the same opinion.

The characters between the *cartouche* and the edge are, Ra, a sun, implying a prince or royalty, a lute, or *nfr*, that is good, and hât, or heart, which implies mind, spirit, disposition; they are no more the name of a man than the figure of a horse.

Therefore I naturally consulted other hierologists, and found, on consultation, the seal was engraved in five perpendicular lines.

The first, Ra. nfr. hât, as above; the second, the cartouche of the king, with symbols of priesthood, that is, a royal priest, or royal believer; the third, the sign of a god, or one worshipped, or Isis represented by her seat of judgment, with the two worlds before her. In the fourth we have a *jackal*, a watcher or guardian. Bunsen, vol. i. says 'governor,' and the symbol above, or 'over,' meaning heaven, which implies divinity. The (below) is sometimes translated 'Ru sat' or 'plain,' 'pleasant,' or 'south.' *Ru sat* is nonsense. I have given reasons why it cannot be that; if Osiris and Noah are the same, it may imply 'pleasant,' or 'plain.'

All the Ancients, as far as we generally know, considered the world to have been a *plain*, but in his 'Astronomy of the Ancients,' Sir C. Lewis shows the knowledge of the 'sphere' must have been known to Archimedes, or before. Again; we have in the English Prayer Book, in Psalms lxxxix. and xciii. 'the round world.' How could eclipses be calculated by Chaldeans or Egyptians, unless they knew the world was a sphere, or round?

It therefore is perfectly plain these writers considered the surface a plain, or 'without form;' some of them were after Alexander the Great, who must have seen the Himalayas, *if* they existed in his time, at their present elevation, to say nothing of other mountain ranges.

Next comes *kah*, or 'country,' followed by two arms and lotus, the symbol of *Nfr* Atm, 'good Atum,' the *good land beyond the setting sun*, Paradise or Elysium.

The fifth presents a hatchet, the sign of divinity or power; the sun, earth, and seas, the hatchet above, or supreme.

If we put these together—and here I must say I only put together the ideas of others—we have good or true believing prince, royal priest Cheops (let any one turn to a dictionary and see the various meanings given to *ἀγαθὸς* or 'bonus;' will they say I am fanciful?); that is, a prince of a true faith, or a righteous worshipper of Isis (who Isis was hereafter); divine guardian (*i.e.* Isis) of heaven, earth, and paradise; God (Isis again) of the sun, earth, and seas, or the elements.

If this translation is approved I claim no credit; I am no hierologist.

But it seems to me this was a seal, signet, or sign, a token of authority, bearing on the face of it the peculiar characteristics or belief of the prince, something like what may even now be seen in a royal ordinance. Joseph's first Pharaoh gave him his ring, as evidence of his authority, to be shown as such; no doubt that ring had on it the king's 'prenomen,' that is, the peculiar mark by which he claimed to be known or distinguished from his ancestors. In early history we find no Edward I. or II., but only Edward. It is now a common practice in the East to show a signet as authority.

But have we not here a declaration, if what I say is reasonable, of the faith of Cheops, carried on his person, shown by his servants when they carried his orders? And is it a very great stretch of fancy to see in it a declaration of his belief in a Triune God, the Elohim, or a God of three characters?

If Pepi of the Kosseir road be the Phiops of Manetho, the Cheops of old Herodotus, we find engraved on stone there

the record, 'Beloved of the gods,' or, dropping the 'the,' Beloved of gods, or perhaps 'loving the gods.' In this tablet, annexed to the sign of God, are ⁝, implying *three* Gods.

Well, if the verdict is against me I shall not be a sufferer.

But now let us see who Isis was. When I turn to Lemprière, who I suppose may be considered an authority (quantum valeat), I find he says, Isis implies 'ancient,' and on some of her statues were the words, 'I am all that has been, that is and shall be, and none among mortals has ever raised my veil!' Have we here, any even the most faint resemblance to Daniel's 'Ancient of Days,' or to St. Paul's 'The world by wisdom knew not God?' or to St. John's 'No man hath seen God at any time?'

May Isis be an approach to I am that I am? viz. (He that) Is (what) Is? or the Was, and the Is, and the coming one of Isaiah? The Saviour tells us, 'Abraham rejoiced to see my day and he saw it and was glad.' Josephus says that Abraham discoursed on religion with Pharaoh; the inference is plain, *of a Redeemer.**

I have, I hope, shown that Abraham's Pharaoh was Phiops, Pepi, Apap, or Cheops, and now in his seal we have an evidence of what was his religious faith.

Herodotus tells us Cheops wrote a sacred book, that is doubtless a religious treatise. In Bunsen, vol. v. pp. 722, 723, we have translations of two inscriptions at Dendera. The first runs thus: 'The great foundation of Dendera. The repair of monuments was made by the king, Lord of Diadems, &c. Thothmes (III.), as it was found in the ancient writings of the king Khufu (Cheops).'

Dendera was a temple. How could the foundation be in writings, except as we speak of the 'foundation' of a college or hospital, that is, the charter or rules of the 'founder?' In this case does not common sense tell us it must apply to some belief? Thothmes seems to have restored or desired to have restored it.

I say deliberately *desired*, for I have before alluded to a Thothmes IV. who I supposed was Moses, and it is nearly

* Jacob's name was changed to Israel. Is it possible this was Is-ra-el-Ra, king-el Is of the Supreme, the chosen of the Almighty?

impossible to follow Egyptian kings of the same name, and place them in proper sequence, may not this inscription have some reference to those 'puritanical' attempts to which Lepsius alludes?

But let us change the position of the words, not alter them, and see the result. 'The great foundation of Dendera, as it was found in ancient writings of King Khufu. The repair (restoration?) was made by the king, Lord of Diadems, &c., Thothmes.'

The other inscription is as follows: 'The great foundation of Dendera was found on decayed skins of kids, of the time of the followers of Horus; it was found in a brick wall on the south side, in the reign of the king, &c. Lord of Diadems, Pepi, living, established, and well, like the sun, for ever.'

Here we have most distinctly, the great foundation of Dendera was written on skins of kids; therefore it was a writing, roll, or book. It is said to be of the time of *the followers of Horus.* Does this imply the descendants of Horus, or persons who followed his opinions? At p. 721, Bunsen vol. v., we have Cheops (Kufu) calling himself 'Horus.' May we not then infer this 'foundation' was a 'great fundamental belief,' on which Egyptian religion was at first intended to be established? It was lost sight of, as we know from Scripture, the Book of the law was lost sight of or neglected by the Hebrews. It was found again in a 'brick wall,' as the Book of the Law was found by Hilkiah; when the Temple was repaired in the reign of king Josiah, 2 Chron. xxxiv. 14.

I imagine the expression of the 'Lord of Diadems,' in the two inscriptions, identify the finder.

Let us again rewrite this second inscription, not changing words. 'The great foundation of Dendera, of the time of the followers of Horus Pepi, on decayed skins, was found in a brick wall, on the south side, in the reign of the king, Lord of Diadems, living, well beloved, and established like the sun for ever.'

In Bunsen, vol. v. p. 721, there is an inscription where Cheops or Kufu calls himself the 'living Horus;' and I cannot

but think this 'great foundation' is the *sacred book* of Cheops. Horus was son of Osiris. Does *living* imply the last surviving Horus?

But it will be asked, Could the religion of the Egyptians have so degenerated? I am a Protestant, and refer in reply to the Romish Church, where we see as great a deviation, apparently, to an outsider from the true faith, as given in a book 1,850 years back.

Between Cheops and Plutarch there were over 2,000 years; neither writing common, or any printing.

If any think I trust too much to Bryant and his 'Mythology,' I beg to remind them that Bryant wrote before Egyptology was known, and as if it were to clear some of the mist from our eyes. Bunsen does not seem to have known his book.

It may be asked, 'How do you account for the difference in the two names, by the characters between Pepi and Khufu?' The name of Pepi is made up of two ■'s and two reeds, the latter being a vowel; why they are translated into two different vowels, I know not. The same characters are read in the cartouche of Menes, as ai, so that we have *one* figure read *three* different ways. As the Hebrew, in the time of the LXX, had not even vowel points, and old Arabic no vowel but a, an *a long*, I am very much inclined to say the old Egyptian had no other sounds but *a*, even if it had that. And I think I am borne out when Eratosthenes calls King Pepi Apap, or Apappus.

As regards the cartouche read Khufu, if I am right respecting vowels, this translation is entirely wrong. The cartouche contains three characters; I exclude the sun: that is no more part of the name than a crown over or on a king's head on a coin. The three characters are, first and last, ducklings or quails, the second a snake. Therefore, the name *must* begin and end with the same letter or sound: this Khufu does not. I imagine that the first writers in Hieroglyphics, when they used an animal or other creature, would be more or less influenced in doing so by the sound that creature made. Now, ducklings and quails both make a noise

similar to our *pe*, a snake to our *ish*. If we put these together, we have P-ish, P, or the very name Phai-sh-op found by Birch *on the tomb*, in Campbell's Tomb, and which I have already pointed out should be read Phi or Pi-shop. Here we have shop against Cheops of Herodotus, and if he was told *shop*, how could he write the *sh* but by a Greek χ (ch)? We have also the Phi-ops of Manetho, the sh being lost in 1,900 years. And Manetho, who was an Egyptian, expressed the sound by *Ph*. Thus with Herodotus Sheops is Cheops, but with Manetho Phe or Phiops.

In Genesis i. *man* is called 'Ish.' If Phiops or Sheops is Shem, may these characters mean 'Pi or the' and 'ish or man,' through whom in the flesh the Saviour should come?

NOTE ON THE PHŒNIX CYCLE.

Doubtless many persons are of opinion the story of the Phœnix should be ranked with the true history of Jack the Giant-killer, the adventures of the Seven Champions, and such like.

I candidly acknowledge such was my own belief only a few months back; but having searched into the subject, I have changed my views, and will explain what they now are.

At p. 190 of my 'Cosas' I have ventured to suggest whether the Phœnix might not have been a comet. At times these bodies have assumed 'such questionable shapes' as to shake the disposition of beholders 'with thoughts beyond the reaches of their souls.' On weighing this suggestion strictly, I feel less liking for it, especially as another theory has offered itself, which seems to fulfil the conditions better.

It will be remembered, the period of the 'Phœnix cycle' has never been determined. Writers on this subject differ as much as Egyptologists do respecting the names and

dynasties of Egypt. One says the cycle was 250 years, another 500, a third three times that time, whilst a fourth assumes 1,460, or the same as the sothic. At first sight there seems little agreement in these figures; yet, if we examine them, we find they are multiples of one common number, or nearly so.

Thus, suppose the Phœnix was Halley's comet, whose cycle is 75 years, $75 \times 3 = 225$, against $250 - 75 \times 4 = 300$, my idea; $75 \times 7 = 525$, against $500 - 75 \times 20 = 1{,}500$, against 1,500, and $75 \times 19 = 1{,}425$, against 1,460. If we suppose the authors quoted a fixed or 'round period' without regard to mathematical exactitude, there certainly is something startling in their conjectures, which, while so widely differing, yet in the root so nearly correspond.

Giving the due weight to this theory which it deserves, I am, nevertheless, inclined to think I can suggest another still more satisfactory.

The mode by which I arrived at a Phœnix cycle of 300 years, was from Constantine's Phœnix medal of A.D. 334, and Tacitus' remark, the Phœnix was seen about the death of Tiberius, which was near, or in A.D. 37; again, Tacitus says it was seen in the time of the third Macedonian King of Egypt, or Ptolemy Philadelphus, who reigned 285–247 B.C., A.D. $34 + 266 = 300$. It is not worth while going back to more ancient as well as *more* uncertain dates. But, finding Halley's comet would not suit these reigns of Tacitus, I was forced to turn my mind to a 'star,' as there was no other comet which could be utilised.

To encourage me, there was *the Star of the Magi*, which doubtless had been handed down to them either by tradition or some record. (See p. 160, and my remarks on the Golden Tablet, and the possible translation of it having been carried by Alexander from Egypt to Chaldea.)

I will try and explain how I came to my present conclusion, which, however absurd it may appear to a *minority*, will, I am well satisfied, have the vote of a *very large* majority.

History has given us a record and approximate date of

nine stars, seen and lost. Of these *nine* stars, the position of two are not given.

One in A.D. 389 was near *a* Aquilæ; that of 1604 in Serpentarius, according to Kepler; that in 1670 in the Swan, according to Hevelius and Anthelm; but *three* appeared in the same constellation, Cassiopeia, viz., the star noted in A.D. 1572 by Tycho Brahé, and before a like star in A.D. 945 and 1264.

That seen by Tycho Brahé was visible for nearly eighteen months (November, 1572, to March, 1574). The duration of those of 945 and 1264 we do not know, but if we had it, the *cycle* would be known: perhaps it is *purposely concealed.*

Of these stars, Mrs. Somerville says, 'It is impossible to imagine anything more tremendous than a *conflagration* which could be visible at such a distance.' Here we have the old poetic notion of the Phœnix burning the body of his ancestor on the altar of the Sun, the star seen at noon-day: and doubtless these, or this star, more resembled a *fire* than a star, if we can put any faith in records.

I fix myself on this star of Tycho Brahé's. Allowing for the *eighteen* (?) months' duration of this star, as well as for different parts of the world where these observations were made, and the well-known inexactitude of old dates, I do not think I shall be much in error if I fix the *cycle* at 315 years. Can, under these circumstances, such exactness be called for as we should expect from the Royal Astronomer at Greenwich, who could *never* see twice a star whose *cycle* is 315 years, or even 15 years less?

With A.D. 1572 to start from, going back four cycles ($315 \times 4 = 1260$), we are in A.D. 312, the date of Constantine's victory over Maxentius, *the night before which,* he had the vision.

In A.D. 334 Constantine struck the 'Phœnix medal.' Is it absolutely needful the Phœnix was seen that year? Monkish writers have called the Saviour 'the Great Phœnix.'

From 313 to 330, as is well known, Constantine had many

matters on his hands, and he may not have found leisure before A.D. 334 to order this medal, and by doing it, he intended to indicate his belief, as Shem or Cheops did, by his *seal.*

Going back one 'cycle' from A.D. 312, we are in B.C. 3, as near the date of our Lord's birth as we can well put it, also the visit of the Magi, who could not in A.D. 1 get to Jerusalem by express railway-trains.

Is it any derogation to this star to assume it might have been seen before? Read my p. 160, written months before I had come to this conclusion.

In old times God spoke in signs, and these were believed, whilst we deny the truth of the record.

Going back five cycles ($315 \times 5 = 1575$) we are in B.C. $3 + 1575 =$ B.C. 1578, when Moses was in Midian, and another marvellous appearance of light occurred, which took the appearance of a bush on fire, whilst he could see the bush did not burn.

Did Moses see this star, which Mrs. Somerville calls a 'conflagration,' shine through a bush, and thought, as we should, the bush was on fire? He would have gone closer, but was forbidden.

His attention was drawn to a bush on fire, which did not consume, and that was enough to make him listen to what he heard.

From B.C. 1578, two cycles of 315 years each, and we are in B.C. 2208. My date for Abraham's visit to Cheops is 2214–2218, when Josephus says they conversed on religion; and it will be remembered the Priests told Herodotus that Philitis encouraged Cheops to build the Pyramids. I think I have proved Philitis was Abraham, and there was a tradition in Egypt there was something of a religious nature in erecting the Pyramids.

Once more; from 2208, three cycles or 945 years, and we are in 3153, just one hundred years before the Deluge (see p. 191.) There is no record in Genesis of a star, but astronomers have found a record in the Pyramid passages, which most decidedly point to *a* Draconis: continue the line of vision

to and *beyond* the Pole star, and we are in ε Cassiopeia, where Tycho Brahé's star was seen. I do not believe anyone can say I have written hap-hazard or made good guesses.

Long before I had worked out the 'Phœnix,' I wrote those words on p. 160, where I said, 'The observer, perhaps, took *a* Draconis, though not above the third magnitude, possibly because it was the most prominent star near where this great meteor was at times to be seen.' I should have said because it was in a line with this *great meteor.*

It is very evident from the remarks of Professor Smyth he thought there was another star or *heavenly sign* connected with *a* Draconis in the Pyramid passages.

The Egyptian term for a Phœnix was, Ph-anac; we know vowels must be dropt. Is there here *any* connection with *Peru*—that is, Manco Capac, the Inca of Peru? Ph-anac implies not *a king,* but a *great* ruler—that is, some one who is *Supreme.*

Dropping vowels, we have Ph (Pi, the) *n. c.*; let us put in other vowels in a different order, we have *Inca*; again, as *m* and *n* were interchangeable, is it *possible* Manco has sprung out of *n. c.*? We get this word through Spaniards of 300 years back.

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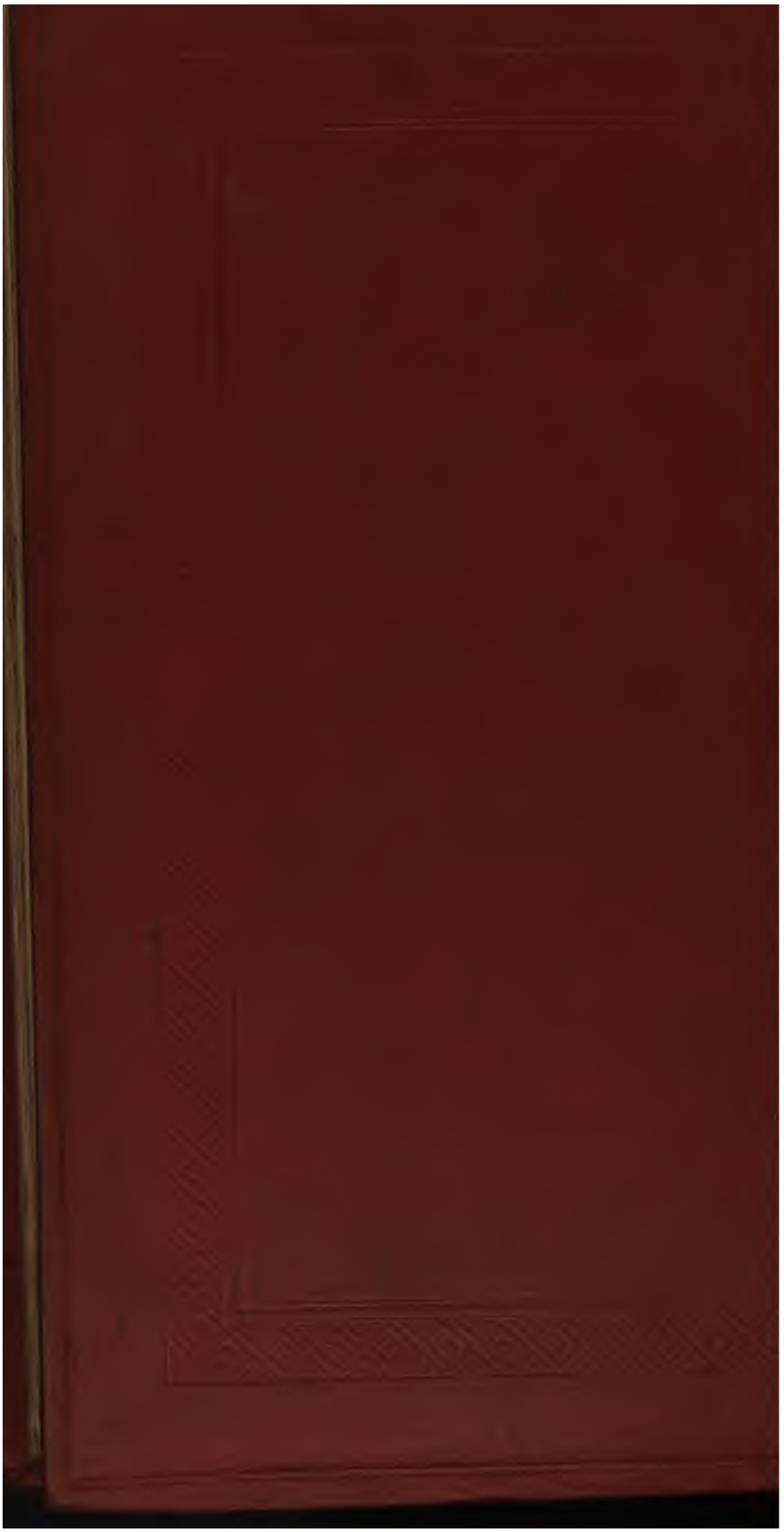
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